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CENSUS BUREAU PLANNING FOR THE 1990 DECENNIAL CENSUS: NEW YORK CITY FIELD HEARING

HEARING

BEFORE THE

SUBCOMMITTEE ON
ENERGY, NUCLEAR PROLIFERATION, AND
GOVERNMENT PROCESSES

OF THE

COMMITTEE ON
GOVERNMENTAL AFFAIRS
UNITED STATES SENATE

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THURSDAY, SEPTEMBER 4, 1986

U.S. Senate,
Subcommittee on Energy, Nuclear
Proliferation, and Government Processes,
Committee on Governmental Affairs,
New York, NY.

The subcommittee met, pursuant to notice, at 10:10 a.m., in the ceremonial courtroom, U.S. Court of International Trade, One Federal Plaza, New York, NY, Hon. Thad Cochran (chairman of the subcommittee) presiding.

OPENING STATEMENT OF SENATOR COCHRAN

Senator Cochran. The subcommittee will please come to order.

This morning we are very happy to be able to convene a hearing of the U.S. Senate Subcommittee on Energy, Nuclear Proliferation, and Government Processes of the Senate Committee on Governmental Affairs to look at the preparations that are being made for the taking of the 1990 census.

The Census Bureau has been working to identify ways to ensure an accurate count of all of the people required to be counted by the Constitution when the census is taken in 1990.

Everybody knows that after each decennial census, there have been suggestions that the count has not been as accurate as it should have been, and in specific areas of the country, one example is here in New York City, there have been serious charges of undercounting. Some say that as many as 500,000 people were not counted here in New York City in 1980.

The consequences of undercounting can be very serious. Federal programs, State government programs, representation in the State legislature, and representation in the U.S. House of Representatives are all affected by the number of persons who are counted in the decennial census. That is why we are trying, as a subcommittee with jurisdiction over the census, to monitor the efforts being made by the Census Bureau to ensure an accurate count in 1990.

We have had hearings in Washington, DC, in my State of Mississippi, and now here in New York to ensure that in the rural areas, in the small towns and communities, and in the large urban areas of this country every effort is made to utilize the techniques, the procedures, the equipment, and the people who will help make this

1990 census an accurate count and a success. That is why we are here today.

We appreciate very much those of you who have agreed to assist us by preparing statements for the subcommittee's use in advance of our hearing and being present to testify to help us and the Bureau understand how important it is that the 1990 census be done well and that an accurate count be made.

Our first witness is Mayor Koch of New York City for whom we are very grateful, and we thank him for his hospitality and for being here.

I had the pleasure of serving in the U.S. House of Representatives with Mayor Koch, and we got to be friends at that time and we remain friends.

It is great to see you again, mayor, and we welcome you to the subcommittee and ask you to proceed in any way that you wish.

TESTIMONY OF HON. EDWARD I. KOCH, MAYOR, CITY OF NEW YORK

Mayor Koch. Thank you very much, Senator.

It is a privilege and a special pleasure, because we did serve together in the House of Representatives, to welcome you in your capacity as chairman of the Senate committee by taking testimony on this very critical issue.

I would like to summarize my testimony and file the formal testimony,[1] if I may. And I would also like to introduce the gentleman on my left who is Fritz Schwarz, the corporation counsel of the city of New York. He is testifying before one of the panels that you have subsequently, but I thought perhaps in the Q and A you might want to get the benefit of his comments as well, and that is why I asked your permission that he join me here at the table.

What is interesting is that the Census Bureau has admitted that there is an undercount, particularly egregious in the city of New York. Their figure—not our figure; our figure is much higher—their figure, which we will accept for the purposes of the discussion, is that there was an undercount of 7.4 percent, whereas the national undercount rate was 1.6 percent; 7.4 percent, say they, represents 524,000 people which is more people than live in Seattle or Denver or St. Louis, and I think roughly the equivalent of the city of San Francisco, one of our great cities. Well, the others are, too.

Now, why would there be this enormous undercount and how do we address it? The reasons are not complicated. New York City is the only city in the country where people live, to the extent of 70 percent of them, in apartments, and 30 percent in private homes. The average in the country is just the other way: 30 percent in apartments and 70 percent in private homes. It makes it difficult when you go to do the count. I will tell you why.

One, we have an enormous shortage of housing in the city of New York, and there are tens of thousands, I will tell you, hundreds of thousands, probably, who are doubled up in the city; two families living together. And they are doing it illegally. We do not enforce the law because if you would enforce the law as it related to that, you would have them out on the street. Because we are short, some say, over a 10-year period, 1 million apartments over the next 10 years, or if you would, to satisfy everybody's individual need for an apartment.

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[1] See p. 35 for Mayor Koch's prepared statement.

Therefore, you will find that there will be people who will not ever tell you, if you are the census-taker, well, there are two families living in this apartment, because it subjects them—even though we are not going to enforce that law unless there is some horrendous situation or health situation. But they are not going to tell you. That would be No. 1.

The second reason that there is a problem in the count is that in the city of New York there are at least 20 languages other than English spoken and spoken in each case by at least 10,000 people who do not speak English while they speak their original mother tongue. So that is 200,000 people who, if the censustaker came and knocked on the door, he could not communicate with them. That is another reason.

There are many people who speak but do not read English. You should know that it is estimated that the number of foreignborn in the city of New York today—we are talking about citizens, primarily, foreignborn—is the highest since 1910 and is roughly 30 percent of our population that were born in other countries. And they are wonderful citizens; that is why we are the international capital of the world because we have that diversity.

My father came from Poland. My father never went to an American public school. When he came here, he was 15 or 16 years of age. He was born on the night of the big storm so we are not really sure what year that was. My father never learned to write English. He could read it and obviously he could speak it; he never learned to write it.

So if my father had received a form, and if he, for whatever reason, might not have turned it over to one of his three children, he probably would not have filled it out. And he might have been lost in that census.

So finally, with respect to the groups that are involved, you have the undocumented aliens. We believe that the Constitution requires that all people in the United States, irrespective of their documentation, must be counted. We believe that there are law cases on this, decisions that make that clear. So assuming, arguendo, that that is the case from our point of view, we have an estimated minimum of 500,000 undocumented aliens in the city of New York.

And I want to tell you, most of these people are very decent people, have been here for many, many years, and I only wish that the Congress would pass the legislation which would legitimize their status and also impose criminal penalties on employers who hire undocumented aliens. I am for that legislation. That is for the Congress to do. We cannot do that locally.

I will tell you something else that shocks people. The Immigration and Naturalization Service does not want us to arrest undocumented aliens. I want to tell you the policy of the city of New York is not to. We would not, unless an undocumented alien was involved with some other crime outside of the question of his status or her status. We do not believe it to be our local job to arrest them. If they are involved in a crime other than that, we arrest them, we turn them over to the Immigration and Naturalization Service, the information, and we believe that criminals who are aliens and can be deported should be deported if they have engaged in other criminal activity. I am not talking about their undocumented status.

But what is interesting is the Immigration and Naturalization Services says to us, in effect, by their statements, "Please do not arrest them because we would not know what to do with them if you gave us their names." Now, that is a fact.

So these people are here. Now, if they are here and they are sick, we maintain a health and hospital corporation which has 15 hospitals and dozens of clinics, sick baby clinics and well baby clinics, you name it, we got it, and we think it is helpful to the country that we provide good medical care.

Well, if they are not counted, aside from the fact that they do not get Medicaid, and they do not get Medicaid, these illegal aliens are still taken care of by the city. If they come to our hospital and they do not have Medicaid, for example, a U.S. citizen or a resident alien legally here does not have Medicaid and they cannot afford to pay, we take them. We say, "Can you pay 50 cents? You can pay 50 cents. If you can pay a dollar, you pay a dollar. You cannot pay anything? We take you."

What should we do with an undocumented alien who comes to our hospital with a sick baby and he does not have a Medicaid card and he is undocumented so you could not even get him a Medicaid card, what should we do? Say, "Take your sick baby elsewhere"? We must treat that baby just from a humanitarian point of view. We think even a legal point of view, but even just from a compassionate point of view.

So we are not going to be reimbursed by the Federal Government because this family does not have Medicaid. But by its disproportionate undercount, the Census Bureau has in effect eliminated, we estimate, somewhere between $26 and $52 million of the kind of aid that comes to a city like New York according to population-based formulas which, Mr. Chairman, you referred to: the loss that occurs there. And so we are asking you to note the fact that the Census Bureau has already said "we do a lousy job." How can anyone say it was a good job if you have a 7.4-percent failure rate, by their facts and admissions; ours is higher. It is a lousy job.

And so what should they do to correct the job? We have a proposal to make, not novel. They have resisted it. It is a statistical adjustment.

Now, when the pollsters decide who is in the lead with a 3-percent error rate, they use a sample of 1,500 people, and they have a 3-percent error rate. Well, the Federal Government, the Census Bureau, has millions of people that they are counting; therefore, if they use a statistical adjustment—they have done it themselves here, but it is not an accurate one—what is wrong with that? Why not correct the error to the best of your ability? They have said that they are not going to do it. What we are saying is, "You should make them do it." They are not an independent agency in the sense of making policy for the United States. The Congress does that.

And so what we are asking is that the Congress enact legislation which will require the statistical adjustment and that that be done in time for the 1990 census.

That is my case, Mr. Chairman.

Senator COCHRAN. Thank you very much, Mr. Mayor. You make an eloquent and persuasive argument for the need to improve the way the count is made to ensure fairness and accuracy.

I am impressed by the statistics you cite, the $26 to $52 million that may be lost here in the city of New York as a result of undercounting in the 1980 census. That is a substantial sum, and whether or not that is the exact amount involved or not, I think we need to help ensure through monitoring and guidance, even legislation if that is required, that we do have an accurate count in 1990.

Now, these people who are running the census today were not running it in 1980. So, you know, I am not conducting the hearing to drag them through the coals of criticism here today. But we are here to get suggestions and to find out from you and others who are very interested and involved how it can be done better.

You are suggesting a statistical adjustment be made, and I understand that, and that even legislation should be enacted to direct that statistical adjustments be made.

Mayor KOCH. Because they have said they will not do it, otherwise.

Senator COCHRAN. Well, let us hear from them now and see what their plans are. I do know that new procedures are being developed. We have found that out from our earlier hearings in Washington, and a renewed effort is being made to explore ways to improve the accuracy of the count. I think by being here today and hearing your statement and the statement of others, we will be better prepared to take the census here in New York City in 1990.

I do not have any specific questions of you. I know the others who are going to be on the third panel, including Mr. Schwarz—whose op-ed piece I read in the New York Times the other day was very helpful in understanding the specific problems of New York City—will be able to deal with those specific questions.

Thank you so much for being here.

Mayor KOCH. Thank you.

Senator COCHRAN. We appreciate your attendance.

Let us now turn to the next panel of witnesses which includes the Director of the Bureau of the Census, John Keane. He is accompanied today by Peter Bounpane and Barbara Bailar. Mr. Bounpane is Assistant Director for Demographic Censuses, and Dr. Bailar is the Associate Director for Statistical Standards and Methodology of the U.S. Bureau of the Census.

Mr. Keane, we welcome you to the hearing and thank you and your colleagues for helping us prepare for the hearing. We have a copy of the statement which you have provided to the subcommittee. We will make that statement part of the record in its entirety. I have reviewed it and am impressed by the effort that the Bureau is making to prepare for the 1990 census. I think that we are seeing a preparation that is more vigorous and more conscientious than we have ever seen in the history of the U.S. Bureau of the Census.

So I want to congratulate you for the efforts that are being made. I know that there are some difficulties right away. The other day at a meeting of our full Committee on Appropriations, as you know, I offered an amendment to try to get an additional $11 million appropriated for the Bureau so that you could buy some automated equipment, some equipment that will help you do a better job, and that got turned down.

Now, that is an example of one of the problems that I know that you are facing. But we are trying to learn today what else may be done and what procedures may be used to make sure that the count in the urban areas of our country are more accurate and fulfill the constitutional responsibility that is placed upon the Bureau of the Census.

Thank you very much for being here and you may proceed in any way you wish.

TESTIMONY OF JOHN G. KEANE, PH.D., DIRECTOR, BUREAU OF THE CENSUS, ACCOMPANIED BY PETER BOUNPANE, ASSISTANT DIRECTOR, DEMOGRAPHIC CENSUSES, AND BARBARA BAILAR, PH.D., ASSOCIATE DIRECTOR, STATISTICAL STANDARDS AND METHODOLOGY

Mr. **Keane**. Thank you, Mr. Chairman.

I certainly appreciate the positive note in which you have positioned this hearing. On behalf of the Census Bureau, any kind of a hearing of this sort that leads to us doing a better job in 1990 and thereafter, we are all for. So the thanks are really ours. Especially I want to make public what I have said to you privately, how much we appreciate your effort to restore the ADP budget, the automation budget for the 1987 census. That is a pivotal thing, obviously, in our plans to make the next census a better one.

In keeping with your request, I will highlight the major areas of my testimony,[1] and it really falls into four areas:

First, problems we encounter in enumerating urban areas; next, our plans to work closely with local officials; thirdly, what we are doing to make the best census possible in 1990; and finally our position on adjustment for the 1990 census.

Taking them in that sequence, enumeration problems in the urban areas. Some of the things that can make census taking in the urban areas difficult are the lower mail return rates, difficulties in recruiting and retaining personnel, the complexity of living situations—I think Mayor Koch was certainly illuminating on some of those—and large numbers of minority populations. Now, we tend to miss minorities at a higher rate than the population in general. Because of these problems, a number of cities sued the Census Bureau during and after the 1980 census. Many of these suits were aimed at having the census counts adjusted.

Our position regarding the 1980 census is that we cannot adjust the census counts. We are talking 1980, now. This is because our coverage evaluation studies, which of course are vital to any adjustment, do not provide us with information accurate enough to adjust.

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[1] See p. 38 for Mr. Keane's prepared statement.

Now, then, for 1990, we have embarked on a dual strategy. We will attempt to take the best census possible and count everyone; although you would probably say that is implicit in the Census Bureau, let us make it explicit for the record, because that is an important part of our dual strategy.

The second part is we will do what is necessary to be prepared to adjust the counts if we determine that adjustments will improve it. And I should say straight for the record that we have never said that we will not adjust the 1990 census count. And I ask for corroboration of my colleagues on my right and left on that, and getting assents from both, I say that for the record.

Well, let us turn back to the positive side of working with big city mayors. I will outline our plans to work closely with local officials to make the 1990 census a success.

If we all work together, we can take that high quality census, one that everyone agrees is the best possible job that might be done.

Mayors have such a wealth of knowledge, and Mayor Koch has a wealth of knowledge, obviously, about their communities, about the city of New York in his case, and a closeness to the people in these communities. Thus, we are committed with working closely with local officials as we plan and implement the 1990 census.

At the center of our efforts will be a series of one-on-one meetings with mayors of our larger cities. In order to assure ongoing contact between the cities and the Census Bureau staff, we are asking mayors—and this is a first—we are asking mayors to appoint high level liaisons—and I emphasize high level. In June I visited, for instance, in New York City with Mayor Koch, and we discussed our mutual concerns about the 1990 census and possible joint efforts for encouraging the city's population to be counted in 1990. And I publicly thank Mayor Koch for his pledge of support and his dedication to a successful census. This was an excellent meeting, and he would say so himself.

We have had meetings with mayors from other cities, and we will hold additional meetings in the next 6 months or so. This is all part of this program, this first-of-a-kind program for establishing a much closer working relationship and a high level liaison with targeted cities.

Three, taking the best census possible, and I will talk now about our specific plans for doing just that. In my full testimony I describe what we are doing to make improvements in five areas. I will highlight those five here. The first one is plans to encourage a high mail return rate. A high mail return rate is vital if we are going to take a good census, complete operations on time and to keep within our budget.

Therefore, we are implementing an extensive outreach and promotion program for 1990. This will include a national advertising campaign under the auspices of the Advertising Council with special advice from minority advertising agencies. We are placing greater emphasis on promoting the census at the grassroots level; that is, through the schools, through religious organizations, such as the Baptist Church, the Methodist Church, the Catholic Church, and so forth, and other community groups. To make sure this grassroots promotion works, we have already begun outreach program planning with community organization leaders. And I might say that that is one of the things that distinguishes the efforts of preparing for the 1990 census almost across the board in contrast with the 1980 census. That is simply an earlier start before attitudes perhaps get congealed and there is time to do things, and taking a census is not just a 10-year time program; it really goes beyond that.

The second issue I will discuss is improving coverage. All of the other topics I am discussing relate in some way to census coverage. But we also have a number of special programs aimed specifically at improving coverage. One of these operations—we call it precanvass—is designed to update and improve our mailing list. In this operation, the enumerators canvass an assigned area to check that this list is complete and is accurate. We are improving this operation for 1990 by having the enumerators check the apartment designation for every unit in a multiunit building.

We also had many census operations in 1980 designed to improve coverage after the census questionnaires have been delivered. We plan to use most of them again in 1990. In our test censuses we are working, though, to refine and to improve these procedures.

These extensive operations included checking vacant units to see if they are occupied or not, seeing if persons on an independent list that we obtained were counted in the census, and special visits to hotels, to motels, to missions, and any other transient quarters and to shelters for the homeless. Canvassing parks, pool halls, theaters, train stations, about anywhere, including the tunnels of the subway system in this city, because after all, if people are there, they are part of our beat.

A planned "Were You Counted?" publicity campaign. We should not ever underestimate what that can do. I am told, for instance, that the city of New Orleans customized such a program in the 1980 census and would very much fit what that city stands for in a way. And the theme was that "I Want To Be in That Number." That is an example not only of a publicity campaign, but one that speaks to the people in that area, rather than just having a generic kind of a program that individuals might have difficulty relating to.

Questions on the census questionnaires designed to obtain complete coverage of everyone in a housing unit, and assistance in filling questionnaires out, including translations into various languages.

We have not yet made final decisions on the details of the coverage improvement program. These decisions will be made over the next year after we complete our review of the test censuses. There is still one test census to go which is scheduled for North Dakota in 1987, and you will recall that our program started way back in 1984. So we need the results of all those test censuses to complete our review.

Increased use of automation. We are going to automate many of the tasks performed clerically during the 1980 census. We are also going to process the data for the whole country concurrently with data collection. This processing will occur 5 to 7 months earlier than it did for the 1980 census. We are going to tailor our concurrent processing systems to meet the needs of different areas of the country, again, rather than having just one generic program when there are differential circumstances or can be area to area.

For larger urban areas we will do almost all questionnaire processing in centralized processing centers. One reason we made this decision is to reduce substantially the number of clerical staff needed in urban areas. The urban district offices can use their resources to concentrate on complete enumeration and data collection.

For rural parts of the country we anticipate fewer staffing problems; thus, we will do more of the questionnaire processing in the decentralized district offices.

Four, recruiting, training and managing personnel, another area of improvement opportunity. We will contact mayors, community organization leaders, and national organizations to help us recruit temporary workers. And I think I can take it out of just the future; I have already had several conversations myself with mayors on this point. We are going also to implement better ways to train, to motivate, and to manage our temporary workers for 1990. Some of these things include restructuring enumerator training so that there is a mix of field work with classroom training; in other words, a person just is not read to hour after hour on the procedures, but gets out into the field to apply them, and the use of video tape so it is a more effective learning experience and therefore the enumerators would be better prepared. An incentive pay plan to reward enumerators who complete a specified amount of quality work, and the incentive plan goes beyond just quality work; that is, doing say, on an average, 12 quality questionnaires in an 8-hour period, to include staying there. There is an incentive to staying there since continuity is also important to superior performance. Staying there until that work is completed.

Daily reporting of cost and progress through an automated management information system. This system is designed and it is now in place and working, aimed at improving our census-taking planning and control.

And selection of enumerators using an automated applicant file, another area of automation in contrast to 1980.

Five, cooperation between the Census Bureau and local officials. In the 1980 census, we established two joint ventures with local officials designed to improve the census. These were the Complete Count Committee Program and the Local Review Program. In our meetings with mayors, we will discuss how to make these two programs more successful.

Under the Complete Count Committee Program, we ask elected officials to form committees of local leaders, and the key responsibility of these committees is to develop promotion campaigns to stress the importance of the census to their communities. These efforts build public support and help us, thereby, achieve a good count.

But ultimately, the success of these efforts within these committees depend on the level of local effort. We will be urging all localities to set up energetic committees for 1990.

The 1980 census Local Review Program gave local officials in over 39,000 jurisdictions an opportunity to review census totals before the temporary census offices closed. We are doing a number of things to improve this program for the 1990 census, such as informing local officials about the program earlier than we did in 1980, providing training through State agencies on how to prepare for local review; and having two reviews of the counts, one precensus and one postcensus.

As with the Complete Count Committees, I want to stress the importance again of local effort to making this program work.

Adjustment. I will briefly mention the second part of our dual strategy, adjustment. We have undertaken a rigorous program of research, of testing, complemented by evaluation of the various issues related to adjustment for the 1990 census. Our aim is to be prepared to adjust the census counts if we determine that adjustment will improve those counts.

In early 1987, we will decide on the statistical and the operational feasibility of adjustment. This is not a decision about whether the adjusted numbers will be the official 1990 census counts. To make that determination, we must have the census counts and the results of our coverage measurement program. If we decide we are capable of adjustment, then we will plan work to permit adjustment. Final decisions about how the coverage measurement program will be integrated into other census operations, including the coverage improvement program, will be made at that time.

We will also announce in the spring of next year the standards we will use to assess whether the census counts or the adjusted figures are more accurate. Again, not the decision, but announcing the standards by which we make that decision.

After public discussion, which of course we always do, of the preliminary standards, we will publish proposed standards in the Federal Register in October of next year. This is the key. We want to reach consensus on these standards among various interested parties in advance of the 1990 census.

The plan for determining whether to adjust has been designed to be independent of the judgment of only one individual. I do not take that personally, I want you to know, Mr. Chairman. It is good for whoever is in that position.

In December 1990, or as soon as possible thereafter, the Director of the Bureau of the Census will make and issue the final decision on adjustment. In making that decision, the Director will be thoroughly advised by recommendations from both internal and external experts in the statistical and demographic fields. This is a sensible plan for reaching a decision on whether or not to adjust the 1990 census counts.

Although census undercoverage has been steadily reduced over the past four censuses, there is that persistent difference in undercount for certain groups and for certain geographic areas. These include urban and rural areas, blacks and Hispanics. It is this differential undercount that is of concern to us at the Census Bureau and to many others, and this is why we have embarked on a dual strategy, the strategy I have just described.

By the same token, I do not wish to imply, however, that adjustment is an uncomplicated matter. Even if we can reach a consensus with stakeholders about what statistical methods are appropriate to use for adjustment, we must consider the operational feasibility of conducting an adequate coverage measurement program in a short timeframe. In addition, we do not have the ability to completely eliminate the differential undercount. We simply do not have it.

There are no techniques that allow us to make a precise estimate of the number of illegal immigrants in the country.

I look forward to continuing discussions on this matter with interested users and stake holders as we proceed with our research, testing and evaluation program.

By way of closing observations, Mr. Chairman, I want to stress again—I know that you understand, but it cannot be said enough—that we cannot take a good census by ourselves. To carry out that responsibility—and it is an enormous one—as efficiently and accurately as possible, we need the help of local leaders. So far that help is forthcoming, I am pleased to report. We are committed to designing a program of local involvement and maintaining the broadest possible communications with local officials. In many respects, a superior national census is, obviously, a series of superior local censuses. That is how we do it. That is how we meet the goal that we collectively agree upon.

So, therefore, working together we can make the bicentennial census—and that is what is making this one so special—a success. We can take the best census possible for urban areas and, for that matter, the whole country.

Senator COCHRAN. Thanks very much, Dr. Keane, for your presentation and your explanation of the plans and efforts that are being made to help make this 1990 census an accurate census, a complete count, as you describe it.

I congratulate you on the work you are doing, and I am also pleased to hear your plans for involving others in the decision about possible adjustments in 1990.

As I understand your testimony, you are in the process now of developing some standards based on research and evaluation, review of past census practices and demographic information. These standards will be announced in the spring of 1987. Publicly, you will tell the world how you are going to decide on making adjustments. Then in the fall of that year, you will formally propose these standards in the Federal Register, and there will be a comment period thereafter for those who have opinions and observations and suggestions or criticisms or other ideas to make those available to the Bureau of the Census before any standards become final.

I congratulate you on that, not keeping all this a secret until it is too late for anybody to do anything about it. I think that is one of the problems, frankly, that occurred in 1980. I was not involved, as many who are here today were, in the 1980 census in any way, but as I understand it, most of the preparation was done, or the involvement of local officials was done sort of at the last minute or during the last year or two preceding the census. That may have been a big mistake.

I think this year there is an effort being made to start well in advance of the date of the census and to meet with mayors as you have done here in New York City with Mayor Koch and around the country, having your meetings in Washington, inviting officials from all over the country to come talk about how we improve this.

So I think you are on the right track. I think you are doing what needs to be done at this point.

I am worried somewhat about the availability of funding, though. Tell me about that. What is your idea about being able to pay for all this. If we get caught in a budget squeeze and a Gramm-Rudman across-the-board reduction in funding, what happens to the promotion budget and the Outreach Program and the automation and the other things that you listed that you have plans to do? What happens to all that?

Mr. **Keane**. It certainly would depend on the timing and the degree of any budget curtailment, as you can appreciate because you have taken up our position in trying to restore the funding in the 1987 budget for automation. If that were to affect something like automation, why, these are vital areas.

I might point out, it is not just the restoration of the funding that is so important; it is the timing of it because if we cannot have the money when we need it for that investment, the return on that investment is less effective. There is training that has to go on. There is installation and the connection of automation that has to go on. We need time to plan and to know that it is coming.

I am not sure, and perhaps you are not either, what is likely to happen in upcoming Congresses. If there are very substantial budget cuts, we will have to look for ways, probably taking it out of other programs and have to wrestle with that inside and likely before committees and subcommittees such as yours.

It seems to be an unprecedented budget environment. That is my impression at this point. I would invite either or both of my colleagues to comment on it.

Senator **Cochran**. What is your plan for promotion? Do you have now in mind some figures or suggested amounts of money that will be needed for an advertising budget, and can you compare that with the amount made available in the 1980 census, to get some idea of whether you are going to be able to do more than was done in 1980 or not?

Mr. **Keane**. We plan to do more than in 1980. In 1980, on a pro bona basis, we estimate—actually, it was an independent estimate by competent professionals—that the census received approximately $38 million in time and space, free publicity and advertising. Just on mini-inflation alone, that might be $80, $90, $100 million now to produce that kind of an effort.

Are there set budgets, Pete? Would you elaborate, please?

Mr. **Bounpane**. Sure. Mr. Chairman, I would like to say a few words about that.

The cost of the total outreach program includes preparation of materials for whatever advertisement you are going to do; that we pay for. The advertising council then arranges for the materials to be aired free, as public service advertising, and that amount of free advertising was worth about $38 million as the Director mentioned.

Of course, outreach includes other things like reaching out to the local officials now, meeting with local communities, et cetera.

All of that in 1980 cost about $35 million, for the total outreach program as broad as you could define it. We are expecting to spend twice that in 1990, somewhere on the order of $70 million.

Senator **Cochran**. There has been some suggestion in statements I have reviewed in preparation for this hearing that one of the problems in getting enumerators to do the actual work of counting is in the lack of adequate pay; that for the money that is available to pay enumerators, you just cannot get people who are conscientious or qualified to work for that amount of money.

What is your reaction to that and what are the plans to try to correct that problem in 1990?

Mr. **Keane**. Well, of course, one of the responses is incentive pay which would have the advantages of both offering greater monetary compensation to a would-be or an actual enumerator. It also depends a lot, Mr. Chairman, on what the circumstances are in the areas where the recruiting goes on.

For example, several years ago in Houston, TX, we had a protracted problem in attracting enumerators. That problem has eased considerably currently. So what the economic climate is in all those areas of the country—and, of course, it is virtually everywhere—that we are trying to attract qualified enumerators to.

Has there been a request for relief and special exemptions on the pay caps of this job, do you know, Pete?

Mr. **Bounpane**. I am not sure about whether there has been relief on the pay caps, but if I could address the question a little bit more, I would like to.

We probably would never be able to pay every enumerator at a rate that might attract very, very high quality everywhere because if you multiply the individual pay rates by 350,000 enumerators, it is an enormous sum of money. And as discussed earlier, the total census budget is a very difficult thing to manage.

I would say that new things, like incentives, have to be added—and that has worked in our test censuses so far. We talked about that when we were in Mississippi. We are probably going to have to ask some of the people in local areas to help us find people to work on the census, people who are willing to do this as a matter of civic pride and help to their community, and who are willing to work at the kind of wage we could offer. We hope that some of our attempts at that will provide a work force that will do a good job for us.

And again, to date, on some of our test censuses, that has worked. Our turnover rates on the test censuses so far have been relatively lower than experienced in 1980.

Senator **Cochran**. As you compare the preparations that are being made now with those which were made in 1980, are you able to draw any conclusions about whether this is a more aggressive preparation, or is it not? Do you have any way to measure your preparations now as compared with any measurements that were done of the preparations in 1980?

Mr. **Keane**. On the measurements, certainly by the calendar a number of activities which we did we simply start earlier, in some cases up to 3 years. A hard measurement also would be the amount of money being devoted to the effort, such as the outreach budget which the Assistant Director just mentioned.

My sense is that, like you, I do not have the timeframe comparison, not being associated with it in 1980, but my sense is that beyond the two things that I mentioned, there is much better planning, it is more integrated planning, the specific area such as automation, much greater automation in a number of areas, whether it be automated mapping, whether it be concurrent processing of the data, whether it be automation of the address control file. There are a host of areas that automation covers. The personnel, the selection process, the incentive plan, the training of in-class and infield work, the mix of videotape with text, the whole mayor contact program that I mentioned earlier in the testimony. I have mentioned that is a first of a kind. We have been inclined in the past to do an effective job at the technical level in the difficult to enumerate areas, especially. But we have not complemented that with high level at both the political structure as well as high level of the ongoing administrations within these hard-to-enumerate areas. So that when we need them to help us sensitize people to the value of a census, cooperation and trustworthiness of it, that is it there.

So that overlay program complementing the technical contact, complementing the review programs and so forth. And a final indicator to me is that we have improved a number of systems, whether it be the Fosdic machine in automation or we have learned how to improve the local review committees. We are better organized. So it is a host of efforts that lead me to believe that we are doing significantly better.

On the other side, if you ask what worries me, I am concerned about what the attitude will be in the country in 1990 when the census breaks. Will it be a favorable attitude toward the Federal Government, and we as part of the Federal Government with this program therefore benefit from that. Is the interviewing climate deteriorating in this country to a significant degree? There are some suggestions that it may be.

For instance, in our test censuses, we ran into some instances where the mail-return rate did not meet our expectations. We have seen some instances outside the country. For instance, Canada did a middecade census in June of this year. The return rate, while enviable at 86 percent, did not match the last return rate of 90 percent. So these are not directly parallel, but we do try and learn from others. And informal, anecdotal evidence, but again, it is not to be ignored; anecdotal evidence suggests that those who do polling or marketing research firms, those who do survey work in general, are seeing some signs of a deteriorated interviewing climate.

Senator **Cochran**. In the New York City area, specifically, there are suggestions of a large number of undocumented aliens and in certain areas of the city are hard to count. Lower Manhattan is mentioned in one of the statements I reviewed as an area where the population is just very difficult to count. It was in 1980 and is expected to be in 1990.

What special techniques, procedures, other efforts do you have in mind to use in this area that will help address and deal effectively with those problems?

Mr. **Keane**. Well, the improved precanvassing operations, particularly, as the mayor pointed out in these multiunit residences, to know who lives where there. The outreach program that we talked about, plus the high level of liaison program, the hard-to-enumerate cities. And that translates into your question because we hope through that to get the neighborhood council heads, to get the chamber of commerce heads, to get media managers and heads to help us with this kind of a challenge, rather than just asking the technical people within these cities to help us.

In short, we are looking for people to help in the self-interest of these cities with people that have contacts and clout. So those are some of the overall responses. We are looking at such things as storefronts, so-called storefronts so that people might go in to get help, Census Bureau manned storefronts to get help if they are having difficulty deciphering the questionnaire, of what it means and completing it; looking at people who we—I understand that in 1980 there were 33 languages that the questionnaire could be translated into by Census Bureau people. We certainly would not minimize that, looking for ways to improve that.

These are somewhat general but I think address your question. Perhaps one of my colleagues would like to comment further.

Senator **Cochran**. In Mississippi, I was impressed at the degree of cooperation from community leaders in helping with the outreach program and the promotion, educating the citizens with the knowledge that they had a personal stake in that, and in understanding why it was important to cooperate.

Do you think you will be able to get that kind of community spirit going in some of the large urban areas? I know you will involve religious leaders, ministers of churches, the tribal chieftain of the Choctaw Nation which has a reservation near Meridian, MS, branch leaders of the NAACP, many others, just trying to reach everybody through personal contact and having ministers talk about it in their sermons. That was described at our hearing in Mississippi as an effective way to get the word out. This is something good that is going on in our community, and we all need to cooperate.

Is that same kind of technique going to work in the large urban areas, I wonder?

Mr. **Keane**. It surely will if we have a lot of Senator Cochrans and Congressmen Garcias to count on, because through your able leaderships there is just nothing that quite approaches the kind of support you get through public service announcements in both instances. So if we could start with your colleagues in Congress to get them involved in the self-interest, the trickle-down effect will be a flood of cooperation in my judgment. And we can get that; we are aiming to hit every sector in the nice sense of the verb, to involve everybody—the church leadership, schools, academic institutions, labor unions—because all benefit. Who doesn't benefit from an improved census count?

However, I think that we can do a better job, at least in one area, and that is translating. We say the self-interest. That is certainly the acceptable term, and it is certainly a true observation. But we could do a better job. I am talking to grade school children, let us say, and it is the seventh grade, getting seventh graders to go home and in understandable and compelling ways being able to tell their parents who may be waffling on whether or not—or may not even know of the census—to get their cooperation.

Just take the instance I cite and translate it into whatever the group would be, whether it is a church-based effort, whether it is a school-based effort, whether it is local community organizations. That is a special challenge that we should take to ourselves, and I am charging the Census Bureau with doing that, starting with myself.

Senator COCHRAN. Well, I think we are off to a good start here and in other areas of the country. Your testimony indicates a willingness to work with local officials and community leaders right now to lay the groundwork for an accurate count, and I think that is important and that is a move in the right direction. I congratulate you for it.

I appreciate your being here in New York City today to help us with this hearing, and your cooperation is deeply appreciated. Thank you very much for being here.

Mr. KEANE. On behalf of all of us, thank you, Senator.

Senator COCHRAN. We now have a panel of witnesses, persons from here in New York City and the general area, who have either worked with or have special knowledge about census problems in the past. We invite you now to come forward.

Our panel of witnesses includes Mr. Frederick A.O. Schwarz, Jr., who is corporation counsel of the city of New York; Mr. David R. Jones, who is general director of the Community Service Society of New York; Mr. Eugene Ericksen, professor of sociology at Temple University in Philadelphia; and Mrs. Hazel Dukes, president of the New York State Conference of NAACP Branches.

I want to welcome each of you to the hearing, and let me just tell you that it was because of Ms. Dukes and Mr. Jones specifically who let me know of problems here in New York City with the 1980 census when I was speaking to a meeting of the Community Service Society of New York that led to this hearing. We were talking about things that were happening in Washington, and this was a topic that was brought up at the time. I appreciate their bringing these special problems to my attention, and I am glad that we were able to schedule the hearing and look very closely at what ought to be done to help ensure an accurate count of New York City in 1990.

Your presence here today is appreciated, and we have statements which we thank you for. We will make those all a part of the record.

Let us begin with Mr. Schwarz, and I would urge you to summarize your prepared statement and proceed with your presentation.

TESTIMONY OF FREDERICK A.O. SCHWARZ, JR.,[1] CORPORATION COUNSEL, CITY OF NEW YORK; DAVID R. JONES, GENERAL DIRECTOR, COMMUNITY SERVICE SOCIETY OF NEW YORK; EUGENE ERICKSEN, PROFESSOR, TEMPLE UNIVERSITY, PHILADELPHIA, PA; AND HAZEL N. DUKES, PRESIDENT, NEW YORK STATE CONFERENCE OF NAACP BRANCHES, NEW YORK, NY

Mr. SCHWARZ. Thank you, Senator.

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[1] See p. 53 for Mr. Schwarz prepared statement.

This is a problem, of course, not just for New York City but for the whole Nation which we must solve.

I would like to comment a moment on the prior testimony. I know the census people well. I do not know Mr. Keane but I know the Bureau because I tried the case in 1980, and I have had other contact at other sessions of testimony with the people who testified before you.

They face a very difficult task. They are dedicated professionals. They are very nice people. And out of all those things, including the plans they talk about, come naturally a glow of good feeling and a sense of optimism.

But I am afraid I must say that we would err and the country would be harmed if we too readily assumed that that glow of good feeling will translate into results that solve this very, very difficult problem of implementing and making real our democracy.

I believe it is fair as a prediction to make, and if they were cross-examined, in effect—they were very honest people. They were very, very honest witnesses at our trial, and they are extremely dedicated, decent and honest people. They would admit that there will be an undercount in 1990, that it will be significant, that there will be a significant differential between the undercount of minorities and nonminorities, and between the undercount of areas like New York City and the rest of the Nation. Those are facts which cannot be and would not be denied by the people who today run the Census Bureau because I know they are honest and I know they are competent.

It is, of course, important to do the things that they mentioned in their testimony and that you brought out in your excellent questioning of the new Director of the Census Bureau. It is, of course, important to do those things, and we in New York City pledge our cooperation with the kind of efforts that you talked about and that they talked about. But those coverage improvement techniques cannot solve the problem, will not solve the problem. They can chip away at the edges, but they will not solve the problem of the differential undercount. And it would not be fair to the Nation to leave that impression that the problem can be solved.

Indeed, as I think one of the most important parts of Professor Ericksen's testimony brings out, in some respects the very fine things that are going to be done and which should be done by way of coverage improvement can worsen the differential in coverage between the poor, the minorities, the less stable members of our society, the less educated members of our society, and the people who have all the opposite of those characteristics. And Gene Ericksen in his testimony can outline for you why that is true.

But even if that were not true, the clear fact which we must face as a nation is that this problem cannot be solved, of the differential undercount, cannot be solved unless we face up to statistical adjustment.

In addition, of course, the cost of each additional coverage step is enormous. There are some statistics set out in the testimony, again, principally of Mr. Ericksen, of how much that cost has been, how much it will be. To put it in cost benefit terms—we should do all these things, Senator—but to put it in cost benefit terms, each extra $100 million that are spent on coverage improvement techniques is going to, to put it colloquially, chip away at the problem and not solve the problem.

The second general point I want to make is that we are dealing here with what I think fairly can be described as a vicious circle that hurts the very people that you and your colleagues are trying to help by the legislation that you pass that deals with education or crime or poverty or housing.

What do I mean by that? Well, as you know, as your own opening comments brought out, to the extent that there is a differential undercount, and to the extent that it particularly bites against the poor, the undereducated, the people who live in high crime areas, people who are minorities, it means less in Federal funds; it means less in State funds. And the result of that is that the very problems of illiteracy or poor housing are more difficult to solve. The very cause of the census undercount—nobody's fault—the intractable, difficult problems of our society are going to be less easy to solve because the money is not going to be there, because the individuals who should be counted, in a perfect world would be counted, are not going to be.

In addition, of course, the census differential undercount affects political representation, and therefore the balance within your body and other bodies, including in the States, is changed to some extent to the detriment of those who are weakest in our society—the urban areas, the poor, the minorities, the poorly educated and so forth; including, by the way, some rural areas that also have severe problems of undercounts.

This is ultimately, and the reason, Senator, why I think the Congress must wrestle with this problem itself. Fine to wait and see maybe in 1987 what they say they are going to do. But ultimately the Congress has to wrestle with this problem because ultimately this is a political issue, a political constitutional issue, a political issue not in the party political sense but in the sense that when we face honestly the facts, we know that both in terms of political representation and in terms of the dollars that come by way of aid for reading or housing or crime, there is a fixed pie and your pie is not getting any bigger that you are able to give out.

You mentioned Gramm-Rudman and all the terrible problems you have with the budget. We are not in an era where the pie is going to grow as it did in the past. At least it is not going to grow enormously.

There being a fixed pie, the consequence of getting an accurate count when we honestly face the facts is that there are some winners and some losers. And that is a political problem.

It is therefore a problem which the Census Bureau, as a dedicated, honest, sincere bureaucracy, is very unlikely to have the political will to solve; and turning that around, it is a problem which properly is lodged with the Congress.

Under the Constitution, indeed, article I, section 2, it is interesting. The Constitution itself makes the census, as you know, a very vital part of our democracy and makes it the Congress' responsibility to direct how the census shall be taken.

Now, obviously, you should not get into the minor details other than in your excellent and general oversight. But on this question of whether there should be an adjustment, it is ultimately a political question and one that should be made by the Congress.

Now, just to conclude: Why is it so important to address this? Fair share of money, fair share of representation—those are the harms that are done when it is not addressed. But it is really important, Senator, because this is the bicentennial of the greatest document: political document in the history of mankind, our Constitution, and we have not yet done what we can do to perfect our democracy. This, in my judgment, is the last structural problem that exists with respect to perfecting the democracy of these United States.

We fought our revolution to become free. We passed our Constitution, which gave the rights that it gave to many. We fought a civil war to make sure that blacks in this society could vote, among other things. We gave women the right to vote. The Supreme Court in the 1960's, facing, incidentally, much of the argument that underlies this question, you know, that it would be a political thicket for the courts to get into one person one vote. Well, Justice Frankfurter, whom I knew well, expressed that strongly, and the Supreme Court was closely divided. They finally did and the sky has not fallen. Indeed, our democracy is working much better.

Well, this question of the differential undercount, which means that certain areas, certain peoples are not getting their fair share, must be solved to make our democracy more perfect, and it cannot be solved unless a statistical adjustment is used.

Thank you, Senator.

Senator COCHRAN. Thank you very much for your excellent statement.

Before asking any questions of you or others, I think we will go through and let every witness make a statement, and then we will have a chance to discuss the issues that are raised in that way.

Mr. Jones, you may proceed.

Mr. JONES. Thank you, Senator.

I am certainly going to keep inviting you to the Community Service Society.

Senator COCHRAN. I enjoyed that. Thank you.

Mr. JONES. It was very kind of you, sir.

I have submitted my statement [1] concerning some of the difficulties that we ran into in the city of New York in the 1980 census. At that time I was the liaison that Dr. Keane really was referring to for the city of New York. I was special adviser to the mayor at that time and made director of the city census effort basically at the request of the then head of the census, Vincent Barabba, who was seeking to do much the same thing in 1980 as is being discussed for 1990.

I do not think it is necessary to go through some of the pitfalls and setbacks that occurred in 1980, except to say that when the 1980 census was just getting under way, when officials from the city of New York were meeting in 1978 and before from the city planning department, the same kind of rosy glow as to new census improvement techniques were being discussed at that time. For instance, the Complete Count Committee was going to be the major effort that the census was going to use in terms of improving the accuracy of the count through community outreach.

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[1] See p. 59 for Mr. Jones' prepared statement.

There were going to be a liaison in each of the major cities of the country who would have the "clout" necessary to get the elected officials with influence involved in getting people in the census.

There were efforts that were being prepared to involve the churches of the city of New York.

The difficult is that while there were some successes, we did in fact form a Complete Count Committee led by a former Under Secretary of the Navy, Roswell Gilpatrick. We did in fact contribute literally hundreds of thousands of dollars in direct city moneys, additionally, and free public service announcements on all the major networks who feed into the New York audience, almost every major radio station that was in the city. We had census messages going on milk cartons. We had a census Sunday. We had "Were You Counted?" buttons on almost every schoolchild in the city of New York. We had sound trucks that the city itself hired and gave to the Census Bureau to go through the streets urging citizens to participate. All these efforts were attempted, and yet still the census had enormous amounts of problems in reaching the population.

Obviously, I have a bias here, but if anything, I think our efforts there exceed some that are being discussed for 1990. Ours was perhaps the most aggressive Complete Count Committee and activity center, I think, anywhere in the Nation. Nonetheless, it fell well short of reaching many of the city's residents.

And I think the mayor has already pointed out some of the difficulties we face, particularly now that the city has an estimated 2 million blacks living here and some 1.4 million Hispanics, and growing daily in those populations. Nearly 50 percent of the population are now minority, which the Census Bureau has expressed are the most difficult communities to count. On top of that, you have the undocumented alien problem. On top of that, you have a vacancy rate that is optimistically rated at 2 percent. All of these factors are almost coming together to make the likelihood of an accurate count even less likely than it was in 1980.

I think anyone who goes through the streets of the city of New York in the poorest communities recognizes that for many poor families, particularly minority families, the housing crisis has worsened, not because of anything that has been done by the city, but because of a worsening economy and the difficulties and high cost of creating new units of housing.

Because of that, again, as the mayor mentioned, the likelihood of families having to double up, triple up, quadruple up or be in units where they are not allowed to be in those numbers, I think, if anything, has gotten worse. These problems are going to run right in the face of any efforts to urge people to participate in an effort which, at best, is going to be perceived as rather distance from the day-to-day realities of trying to make a go of it in a city as complex and tough as New York City is.

There were serious problems that occurred in 1980. And, again, I do not think it was a planning problem. As a matter of fact, as I see some of the people—I was not always considered the best friend of the Census Bureau, but as I see many of my friends or acquaintances from the Census Bureau, I remember the planning was good. The difficulties arose because of the lack of funds, essentially the tools were not in place, because no one could come up with the budgetary amounts of money necessary to really make a strong showing in New York.

When one of the Census Bureau representatives talked about the fact that they were going to be relying on volunteers who were civically minded, in the city of New York, with the youth unemployment rate that is up in the 40- to 50-percent range, where people are literally scraping by, where rents are now well above $400 or $500 per month for working people in poor neighborhoods, to ask someone to volunteer, I think, is being insensitive, if anything. The problems are tough for people, and to ask them to volunteer their time at this time in their lives when so many difficulties are confronting them, I think is to ignore the realities of being poor in the city of New York.

All of these things make the notion that we are only going to see somewhere around the minimum wage or somewhat above being paid to people as a major disincentive to getting the kind of quality enumerators needed to go into poor neighborhoods.

I must admit, I was outraged when, in 1980, one of the officials of the Census Bureau came to me with great hope in his eyes saying, "We have finally found a new group of enumerators who can go out. We are tapping in to methadone maintenance individuals." And I looked at him, and I said, "Where?" He said, "Central Harlem." And I almost had a fit because the misunderstanding and misperception of the communities, the notion that my grandmother living in Bedford-Stuyvesant, very similar to central Harlem, would open the door to someone who is having a drug problem and be excited by it, with as rigid as she was and as frightened as she was of crime is to misperceive poor communities. If anything, you need the most skillful enumerators of anywhere in the country because you are going to populations that are terribly concerned and frightened, not only about someone coming in and messing up their living arrangement, but of crime.

That kind of thing is going to take enormous sophistication, and quite frankly, if you double the wedge, you probably could not make a major impact on that problem.

So these kinds of things have to be understood. The outreach project, which I hear was going to be doubled, I am not good at math, but I know there has been inflation; not much, it is lowered. But essentially, we are not talking about a budget that is doubling. We are talking about perhaps a 10-percent increase in the amount of money to be spent on public service effort.

All those factors make me get a real sense of deja vu here; that, again, we have good-spirited people having good plans, but without the budgetary wherewithal, really, to do the things they hope to do. And I think in light of the budgetary constraints that have been placed by Congress, that it is even less likely that, when we get to this 1990 census that the money is going to be in place to really make a significant impact in improving the accuracy of the count.

This is not even taking into account the people who are not going to come forward. Because I have a two-part statement here and I will close with it. If we had unlimited funds, I still think there would be a disproportionate undercount of this area in the city of New York. We might improve it; we might chip away, as Mr. Schwarz says. But ultimately we cannot overcome the resistance in this community, not because of lack of patriotism or lack of good community spirit, but because people are under the gun in the city of New York, poor people are under the gun, and they just cannot take the risk.

This was told to me by the now Catholic bishop of Pittsburgh now, Monsignor then, Bevelaqua, who I almost convinced with census help that the Catholic Church should play a major role in convincing citizens of New York to participate in the census. And finally what the now Bishop Bevelaqua told me, he could not do it because the fear of confidentiality among their parishioners and the danger that even one would somehow be turned in to perhaps the Immigration Service or lose their apartment because they had one child too many, was just too great. And the Catholic Church refused to participate in urging its parishioners to get involved in the census. That problem is going to exist no matter what we do.

I think taken together it makes it incumbent upon the Congress to look at adjustment. That is going to help urban areas, one, but also the minority communities of the entire Nation who are having tough times along with working people and unemployed people everywhere.

Senator COCHRAN. Thank you. Thank you very much, Mr. Jones. An excellent presentation.

Let me call now on Professor Ericksen.

Mr. ERICKSEN. Thank you very much for the opportunity to testify.[1] I am here to make three basic points.

One is regardless of how much money and effort are expended on the traditional head count, the differential is inevitable.

Second, the coverage improvement efforts that we have heard about which are aimed at simply redoubling traditional head count efforts do not solve the problem, and in some ways they make it worse.

Finally, there are methods of statistical estimation that exist by which an imperfect census can be brought closer to the truth.

I would like to second what Mr. Jones said, that the problems of the census undercount are not necessarily for a lack of good ideas. I would like to give you a couple of examples of that.

In the 1980 census, Temple University was part of the nationwide program in which students were going to be recruited to learn to become enumerators. Faculty such as myself were recruited to teach classes which gave the students 6 hours of course credit toward their undergraduate degree and a guaranteed job working as a census enumerator.

Together with the Philadelphia Regional Director, Mr. David Lewis, he and I gave a lot of publicity to this and held a number of recruiting sessions at which I would say approximately 150 students came. We told them what they were going to do, how they were going to get the credit; there was a great deal of interest. But at some inevitable time, we told the students that where they were going to be doing their counting was in north Philadelphia, which is our version of Harlem. At that point maybe a third of the students got up and left, and when all was said and done, we had 15 or 18 of 150 students that came to the meetings actually go through the program.

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[1] See p. 67 for Mr. Ericksen's prepared statement.

So I think that the fear of going into difficult neighborhoods and taking the count make it really impossible to hire a sufficient number of trained enumerators.

The second example has to do with creating a master address register. A master address register is the key to the entire census because that is the list of addresses to which the forms are sent. In areas such as north Philadelphia, which I am very familiar with, and in many of these areas in New York and other large cities, you have large, three- to four-story buildings that have one door, one doorbell and one mailbox. No matter how many people you send, whether they be postal employees, precanvass employees, Census Bureau supervisors, every time they walk by that house they are going to see one door, one doorbell, and one mailbox. Now, anyone who has ever done a survey in an urban area such as that knows that those doors commonly have anywhere from two to six apartments inside that one structure, that it has simply been subdivided. The only way you can find out about those two to six structures is actually to go in there and ask people where they are, essentially taking the census twice. And all the precanvass and all the money you put toward that are not going to solve that problem.

Now, according to the General Accounting Office, in 1980, $342 million were invested in coverage improvement. The per capita inflation adjusted cost of counting one person in 1980 was $4.72. In 1970, it was $2.30. So even after adjusting for inflation, the cost of counting in 1980 was double what it was in 1970.

The General Accounting Office projects a similar rise for 1990. What do we get for that extra expenditure of funds? According to a demographic analysis computed by the Census Bureau in 1970, the undercount for blacks was 6.1 percent higher than the undercount for nonblacks. In 1980, after all this extra money was spent, the calculation made by the same procedure indicated a differential of 5.9 percent. No real difference.

Now, to give you an example of how public improvement programs can make things worse, let me go back to the example that I gave you of recanvassing areas to find if there are houses which are not included in the initial list. I have tried to give an example of how this does not find all housing in urban areas. In rural areas, where housing does not have identifiable street addresses, you often have to rely on descriptions of houses. And you have different enumerators going out trying to update lists, often with severe time pressures. Different people will see the same house and give it two different descriptions. It will be included in two different lists and will receive two census forms and often be counted twice.

A Census Bureau study estimates that 2 million people live in households that were counted twice in the 1980 census.

I argue that the solution to this problem is a statistical adjustment. Now, the Census Bureau used the methods that I and many other statisticians would advocate for an adjustment when it adjusted the 1970 census by the national vacancy check. Very similar methods involving demographic procedures, matching procedures, and regression procedures are used by the Census Bureau to calculate per capita income estimates and population growth estimates for 39,000 revenue sharing units for every year after the census.

My own research indicates that using data provided by the Census Bureau from the 1980 census, calculating adjustments by a variety of different methods, and making a variety of assumptions all indicate the same result: Areas with higher proportions of minorities have higher undercounts; cities like New York have higher undercounts than other areas with similar proportions of minorities. A statistical adjustment would shift the population shares from certain types of areas to other types of areas regardless of the assumptions that you make.

Given the fact that the Census Bureau has used these methods in other contexts and given the widespread urgings of other statistical and demographic experts toward an adjustment, the question arises, why does not the Census Bureau adjust?

I argue that the reason is political. Vincent Barabba, the Director of the 1980 census, made the following statement:

> If in fact the Bureau does all the things it plans to do and enumeration is still differential, then the dilemma arises. The decision about what you do in that case is a political decision.

Now, if the Bureau were ordered to adjust, and my own personal opinion is that is the only way it will happen, I am confident that they would do an excellent job. The Census Bureau did a very good job of adjusting the 1970 census by means of the national vacancy check. They do an excellent job of calculating post census estimates of population change and per capita income.

Thank you.

Senator **COCHRAN**. Thank you, Dr. Ericksen.

Mrs. Hazel Dukes.

Ms. **DUKES**. Good morning, Senator, and thank you very much for listening [1] to us and coming with action. It is very difficult to believe that a man from your part of the State would have taken time to listen to facts that was earlier presented to you.

I am pleased to be here today to share with you my views on this most important subject, the 1990 census. The members of the 77 NAACP branches throughout New York State have an abiding interest in developing measures that will ensure a full and fair count of all New Yorkers, particularly black New Yorkers. We especially know the negatives of the undercount. We know that allocations of all types of resources are based on the number of people living in a community who are not counted in a census. At the top of the list of those things that directly impact on all aspects of life is political representation. Go back to what my last colleague just said. Congressional seats, State legislative seats, city council seats, county board positions, and school board positions are based on the number of people living in an area who are counted.

Based on the last census in 1980, political representation in black communities throughout New York State increased at the congressional level by 309 percent with two blacks elected to Congress in Brooklyn and one about to be elected in Queens. Although we are not happy because our twin cities, Buffalo and Syracuse, should also be electing a Congressman at this point.

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[1] See p. 83 for Ms. Dukes' prepared statement.

Now, it was good, but a full count has not been made. There should be at least two congressional seats in areas where black New Yorkers live if a full count had been made in the 1980 census An additional three to five seats in the State legislature would have been won by the black community.

Laws and budgetary decisions made in the Congress and in State legislatures can be made more fairly and sensitively for all New Yorkers if those who are the lawmakers include a fairer representation of all New Yorkers.

In addition to political representation, many Federal and State financial allotments are based on the population that is counted. Entitlement programs in many areas are vastly underfunded because the black and poor communities are not counted.

Let me go to some of the things that we believe in line with what the Census Bureau people who are here this morning outlined to you. But even in 1980, as Mr. Jones can tell you, NAACP was not contacted or notified in writing or by telephone call until they were in the process of doing the census count and was told by City Hall at that time that there was an undercount. I share with Mr. Jones the outrage we heard when we said we were going to get methadone patients to go into our community. But I also know that we do not have to go to Temple University to train young men and women to take a census count.

If you come to a community base in New York State, we will be celebrating 50 years of the NAACP in this State. We are in every nook and crook of this State. We have persons who are in need of work. I would fight for an increase in the amount of salaries that we give. I most certainly would not advocate we ought to have volunteers to do this job. It is insensitive to even approach it from that standpoint.

I think an orientation to persons who reside in the community where we know that an undercount would probably take place is the best way to go after solving this problem. I do believe that we need an increase in the budget amount. But the basic cross for those of us who are black, Hispanic, Asian, is for our communities to be involved. I strongly recommend that we have advisory committees set up throughout this country of basic leadership groups, along with our political leaders. This is not a party. I agree with our counsel. This is not a party. This is a constitutional right for all of us to be counted.

So those allocations, those resources, those political entitlements that we should also have regardless to whether we are poor, whether we are black, whether we are Hispanic, whether we are Jewish or Italian, should be the main center of effect that should take place for the 1990 census.

I come today as the president of the New York State Conference of the NAACP Branches reaching out to say that we want a full count, that we are available. We have offices throughout this State. We have men and women who can participate as census-takers, not for free but with the limited resources to be divided equally. They would be there.

I come ready, willing, and able to see that this mandate is carried out for this State of New York.

Senator **Cochran**. Thank you very much, Ms. Dukes.

Well, I appreciate the panel's participation in this hearing. I think it is very informative, very helpful, and I am optimistic that we are getting somewhere, that we are getting to the bottom of the problem. We are finding out some things about the realities of taking a census in New York City that will inevitably benefit the census-takers.

Let me ask a little more about the suggestion that the mayor made and that Mr. Schwarz has repeated concerning an amendment, legislation that ought to be introduced to clarify the authority of the U.S. Bureau of the Census to make statistical adjustments.

As I understand the suggestion, the law is not as clear as it could be in that respect. I know that in the statement on page 4 of Mr. Schwarz' statement, there is a reference to a section of the United States Code which you say plainly authorizes the Bureau to include "the use of sampling procedures and special surveys" as part of its decennial census-taking procedures, and that has been held by a court to mean that the Bureau is prohibited from relying solely on sampling.

I understand that next you say that the Bureau says the statistical adjustment would somehow politicize the census.

In looking at the statute itself, I want to read the provision. It says, "The Secretary shall"—and this is, I guess, the Secretary of Commerce——

Mr. **Schwarz**. Yes, it is.

Senator **Cochran** [continuing]. "Shall in the year 1980 and every 10 years thereafter take a decennial census of population as of the first day of April of such year, which date shall be known as the decennial census date, in such form and content as he may determine, including the use of sampling procedures and special surveys. In connection with any such census, the Secretary is authorized to obtain such other census information as necessary."

Well, it would seem to me that that does authorize the Secretary to use statistical adjustments or samples or surveys. But then it has been brought to my attention that the Bureau of the Census has called to the attention of some courts that there is another provision of that law, section 195, which provides the following: "Except for the determination of population for purposes of apportionment of Representatives in Congress among the several States, the Secretary shall, if he considers it feasible, authorize the use of the statistical method known as sampling in carrying out the provisions of this title."

Is there any inconsistency between those two?

Mr. **Schwarz**. Well, Senator, I think congressional clarification would be desirable. Now, we won the argument, putting the two together, that they were not prohibited. That was in a district court. And I think it would help, and I like your idea, to have the Congress clearly state that—as long as statistical adjustment is not the only method. It would be crazy to make it the only method. We have to use the traditional methods to some major extent. But to have Congress clearly state that they are authorized to use statistical techniques in the decennial census, including for the purposes of apportionment.

Now, I believe that the Congress should go further than that and say that they should use such techniques so long as the techniques will result in a more accurate count That should be the standard. You know, not if it is a perfect count. We know that existing methods cannot be perfect. We have to admit that. Neither can statistical methods be perfect, but the standard should be, can they make it better? Or as the Supreme Court held in the one person, one vote cases, you should have an accurate count "as nearly as practicable."

I think if the Congress were to express its will that sampling is authorized or statistical techniques are authorized, and that they should be used if they will improve the results overall, it would make a major contribution. It would help the Census Bureau with what is a difficult problem. They are taking on a burden if they on their own, without some assistance from the Congress, say, well, we are going to change statistically. And I think you could make a very, very major contribution by passing such legislation. Then leave to their considerable expertise, which I agree with Gene Ericksen would be carried out fairly and well.

And we would be happy, Senator, to work with you or your staff on suggesting language that would make a real contribution to this problem.

Senator **COCHRAN**. As I understand it, the question of the meaning of that phrase that I read in section 195 is still the subject of litigation. Is that correct?

Mr. **SCHWARZ**. I think they have not abandoned that position. You are correct.

Senator **COCHRAN**. No court has actually said that the law authorizes sampling even for the purpose of apportioning the seats in the U.S. House of Representatives.

Mr. **SCHWARZ**. Two courts have held that in our case, but the district court specifically wrestled with the apparent conflict between 141 and 195 and resolved it in the way we were arguing. And the circuit court in an earlier stage of the litigation held that statistical adjustments were permitted by both the Constitution and the statutes.

Nonetheless, as a matter that is open for litigation, it seems to me it would be helpful for the Congress to clarify that.

Senator **COCHRAN**. Well, I am glad to have your thoughts about it, and I think the Congress ought to review this area and try to decide whether legislation is appropriate to authorize it.

Let me ask Dr. Ericksen this question: Are we far enough along in our statistical adjustment expertise and technical competence to be able to make a sample, take a survey and obtain the kind of information that is important for us to have when we do take the decennial census?

Mr. **ERICKSEN**. Well, I guess I should answer your question in two ways.

First of all, as you probably know, sampling is an important part of the census itself. One out of six households in the census was assigned the long form which provides information on income, education, and occupation. So sampling is already a very important part of the census.

I am not sure if that is what you mean by your question.

Senator COCHRAN. Can we substitute sampling for the obtaining of the information that the Census Bureau does obtain every 10 years? There is a lot of information other than just how many people live in New York City that the Census Bureau gets.

Can we, by sampling or statistical adjustment, make up the difference, the shortfall between what you get from a sample and what you get from the more detailed enumeration of the population?

Mr. ERICKSEN. Well, yes, you can. First of all, in 1980, sample information was available from the Current Population Survey which is the basis monthly survey of the Census Bureau used to estimate the unemployment rate in the country. It has the highest response rate of any survey I know of in the United States. It is an excellent source of data.

And the sample from the Current Population Survey was matched against the census to estimate the proportion of the population that was omitted from the count.

The Census Bureau then sampled its own count and went back into the field to estimate the proportion of people who were erroneously enumerated. So you can take the estimate of erroneous enumerations, subtract it from the estimate of omissions to get the estimate of the undercount. And those estimates were published, and the standard errors which are the errors due to the fact that you have a sample and not a complete census, were very small for those areas which had high undercounts.

For example, the standard error of the New York City estimate was about one-quarter or one-fifth the size of the estimate.

Now, we think we can improve on those sample estimates by a statistical procedure known as regression. And I mentioned that making estimates from a variety of assumptions gave essentially the same result; I was primarily talking about regression estimates. The estimates of undercount for areas such as New York City, are many times greater than the error attached to them.

I conclude that adjustments to the census count for areas like New York City can therefore improve the proportionality of the count of the entire United States.

Senator COCHRAN. The Census Bureau testified today that in the case of undocumented aliens there was no way to really count them using the sampling or statistical polling. What is your reaction to that?

Mr. ERICKSEN. Well, what I believe the Census Bureau meant is the following: That it is very difficult to design a survey, and I say this having directed a very large survey to identify undocumented aliens in New York City hospitals, to identify who the undocumented aliens are in the census. That is a job which I would agree with the Census Bureau is impossible.

Now, the other issue is actually counting the undocumented aliens. Now, undocumented aliens are an extremely difficult-to-count population. The Census Bureau estimates that they counted 2 million undocumented aliens in the 1980 census. The problem is they do not know just which of the people who they counted were undocumented. They estimate this through indirect methods using other data.

So I think the answer is yes, the Census Bureau can count undocumented aliens. They probably miss them at a higher rate than the general population. No; the Census Bureau cannot identify who the undocumented aliens are individually that they have counted.

Senator **Cochran**. What would you suggest as a standard for deciding when to use statistical adjustment? You heard our discussion with the Census Bureau that under way now is research and review of previous census activity, demographic information. For the purpose of developing a standard, what would you suggest as a standard?

Mr. **Ericksen**. I think that the estimates of undercount should be consistent with what we know about the American population. Demographic methods exist which actually give us a better estimate of number of black and nonblack Americans than the count does. So any adjustment should be consistent with the demographic information that we have.

For local areas the size of New York City, the estimates of undercount should be reliable. And what I mean by reliable is that if the adjustment is substantially different from zero, and that means it has either a very large positive or a very large negative adjustment, that adjustment should be larger than its standard error, which is the measure that statisticians use to evaluate the error of an estimate.

Mr. **Schwarz**. If I could, Senator, give a supplement to that answer. Putting it in more layman's terms or constitutional or statutory type of language than statistical language, I think there are two formulas that you could use in addition to the more statistical ones.

One is the common sense question, will statistical adjustment improve the results overall?

The second is to take the language that the Supreme Court has used in applying its one person, one vote test, which indeed we persuaded the second circuit was the right way to analyze the census. And that is that one should have an accurate count "as nearly as practicable."

I think if you put those two things together, no doubt with some of the more technical statistical jargon and language, you have the guts of what would be the appropriate standard.

Senator **Cochran**. Well, one thing concerns me, and that is that when the Congress approved this language of section 195, it clearly indicated that except for determining population for purposes of apportionment of the Congress, the Secretary would be authorized to use sampling. There had to be, in 1957, which I presume is the date that that provision was first written, some reason for making that exception. And I just wonder whether or not we have developed techniques, expertise since then that is a reason for abandoning that exception, even for the apportionment of the House of Representatives should there now be sampling authorized?

Mr. **Schwarz**. I think that is a very good way of putting the question, Senator. 1957 was the year I graduated from college, and looking at you, it might be roughly equivalent for you.

Senator Cochran. Right.

Mr. Schwarz. And we sure have come a long way on the use of statistical techniques and in fact their acceptability to the public. I mean, there was a time when sampling, polling, you know, just was not acceptable, was not believed to be real. That is not the case today, and it is much more scientific today than it was in the dim, dark days of our past.

Senator Cochran. In connection with the work being done now to involve community leaders, groups that can help encourage cooperation and participation in the census, I worry that you say to me and to the committee today that some of this may be counterproductive. I mean, it may even result in a greater disparity between the number of people who are really there and the number who are counted. That bothers me.

How can the census-takers correct that or is there a way? I know money is a problem, and I was impressed by what Mr. Jones said. Planning was good in 1980, he said. Even if it is better for 1990, it may not solve the problem. I heard that.

Mr. Jones. Well, I think the generic, since you really talk to it, but I can tell you one area that it is going to happen right away. If you go to a community group, church group in Winnetka, Illinois, and propose as a good government something that is going to help their community, their turnout rate of people willing to go for little or no money to do enumeration is going to be pretty tremendous.

Bring the same program into my neighborhood, Bedford-Stuyvesant, with unemployment running 50 percent, with the problem of minimum wage something that is really of tremendous concern, it is going to be harder to get people to do that kind of activity. In other words, the richer areas where things are going better are going to be much more receptive to the kind of appeals that the Census Bureau is now crafting as discussed here this morning than a poorer community could ever hope to be.

Senator Cochran. One thing that was mentioned, and Ms. Dukes may want to comment on this, and please do if you would like to. You mentioned about the fear in some neighborhoods that if some stranger comes to the door and is going to come in and ask you some questions, he is just not going to get in there no matter what he says or what he says he is there for or anything.

Ms. Dukes. Absolutely.

Senator Cochran. My question is this: Can that problem be solved in doing a better job with mailing lists, by getting to that person in another way?

Your grandmother, for instance, would probably very well respond to a questionnaire.

Mr. Jones. Right.

Senator Cochran. If she believes this is for the good of the country, that person is going to respond in that way.

Mr. Jones. Right.

Ms. Dukes. See, I think we need to have some updated techniques coming into the 21st century. I think, No. 1, we ought to examine the census form that we have now.

I think that some of the information on there is quite crazy. I live in a suburban area of this State in Nassau County. My school every year sends out a census, literally. If I am still there, same number of persons in the household and then all I have to do is sign my name and send it back. There is nothing else to do.

I think the whole form that we have must be re-examined, there must be some rewriting of what information we really want to know.

I believe even in the poor neighborhood, we have voter registration in poor neighborhoods, and it has been those persons in my neighborhood in Roslyn, they are poor people. But yet those poor people know me.

There are senior citizens where I am sure if we have senior citizens in a senior citizen center where we want to do a census, we can do it and there will be no complaint.

I think we have to come up with some better ideas. I do not know who is in the top positions in the census throughout the country. Maybe we need to revamp and look at our employment area in there so when we get ready to do this we have a sensitivity that runs through the whole operation of the Census Bureau.

I would believe there are great people, they are nice people. I have not had much contact with them as our counsel here, Mr. Schwarz, but I have a feeling from 1980, when Mr. Jones walked into the NAACP office at 250 West 57th Street, I have a feeling that we still have some very insensitive people and some bureaucrats still in the Census Bureau. And I think that that is where we need some overhauling done and more coming into the 21st century.

I would have to tell you that statistical data is very well accepted in our community these days, that it is a new form of data that is being used in all instances, that it could be applied to this.

One of the colleagues here mentioned the vacancy rate that we have in our community. That most certainly is some way to have statistical data used in our larger urban areas such as in New York City and Syracuse and Rochester. That can be used, the vacancy rate, in those areas.

When you look at New York, it is kind of unique, if you will. You have to look from Westchester County to Nassau County, from Nassau County to Suffolk County. Each one of these subdivisions politically brings its own strength and its weakness to how the Government interacts with its people, if you will. Even the five boroughs in New York City, you have to know who is the government there. There is a lot of play to come in that in New York State and, of course, we pride ourselves on what we have done here because the Statue of Liberty here beckons all to this country, to this State more than any other State, even from your State. They come here looking for a better life.

There is a way, I believe, to have a better count than we did in 1980. I am told by a person who was involved that 1970 was better than 1980. We need to look at what happened in 1970. I do not know. I was not that much involved in 1970 in what went on as I was in 1980.

But I think we ought to look back at some of the history to take out that which was good, that which was not so good, and see now while we still have the planning stage. I am not so sure, Mr. Jones, that all the planning was good and well intentioned because I know that they left out community-based groups such as the Urban

League and NAACP. We were not involved in the planning stage at all. It was after everything was put together, even, if you will, the material, the written material. They brought us material that we know had no relevance to our community.

Senator **Cochran**. Well, I think that identifies a problem. The complexity of the information can be overwhelming to a lot of people who are being asked to fill out forms and send them in. I think a simpler, shorter form is going to be a big help in getting a greater degree of cooperation.

Mr. **Jones**. Certainly in 1980, we had a major problem with the master address register. As you were alluding to, yes, it is less toxic to have something received in the mail than someone knocking at your door, even though the response rate in poorer neighborhoods is much lower. And I think the test census was a perfect example of that.

But if you can get it into the household, you have got a better shot at it. The trouble in 1980 we encountered, as I mentioned in my testimony, essentially the lists being used to compile the master address register were commercial lists, the commercial lists used by credit card companies and realtors whose main interests were in neighborhoods where they thought they might have potential customers. They had essentially left the poorer neighborhoods in the city of New York unupdated for 10 or more years. That left those lists almost, in my view, useless for many communities in the city.

I think it would be extremely difficult to find the money and wherewithal to actually make those lists accurate enough to make a substantial difference between 1980 and 1990. Again, I think you would have to visit, do a precensus as Dr. Ericksen mentioned, of each household, go out into the streets, knock on each door, go inside and see how many units actually exist within a particular building or tenement.

I do not think the money is available for that. Certainly, we would encourage it if they are seriously considering it. But we think that the master address register is going to be crucial in determining even some modest improvement in the accuracy of the count.

Mr. **Ericksen**. I would just like to add one point to that. One of the solutions which was oftentimes suggested for improving this problem is to make greater use of the telephone. And many of the lists that were used for the same purpose as the commercial list in New York City could have been derived by taking the telephone directory, and companies will essentially turn it inside out and give you address lists of all the houses that have telephones, which would be a good start for the master address register.

The problem is as follows: In my hometown of Philadelphia, I wrote a report on the Puerto Rican population, and 30 percent of all Puerto Rican households in Philadelphia have no telephone, compared to a rate of about 5 percent for everybody else.

On a national basis, I made an estimate for black families living in poverty. Around 40 percent of those families in many areas were without telephones.

And so all of the procedures that we use, commercial mailing lists, the post office, telephones, all of those are set up to communicate with the average, well-educated, middle class type of family. And when you go and try to have a procedure which is the same for everyone, it is not going to affect the poor populations in the same way. It will not work as well there.

Senator **Cochran**. I think that is the point that comes through very clearly today, and that is that an extra effort and additional procedures that may be unique in a neighborhood among an ethnic group are going to have to be used. Advisory committees, as Ms. Dukes suggested, are just going to have to be used in communities and in neighborhoods to help ensure a total, complete count, an accurate count. These new procedures may have to be looked to.

I am going to continue to explore the possibility of legislation with those of you who have suggested it. It may be that that would be helpful. I am not prepared today to say that it is the answer or that it would be helpful, but it may help clarify the authority that the Bureau has. Maybe the Bureau would suggest clarifying language that it would find helpful.

We will continue to work on that and monitor the preparations for the 1990 census. This has been an important hearing, I think, in that effort. We will adjourn this hearing at this point with our thanks again to Mayor Koch, to his staff, to this important panel who has been helpful to us, to Dr. Keane and his staff of the U.S. Bureau of the Census in Washington.

We appreciate everyone's cooperation We will continue the effort to monitor with hearings as we go through this process. So the hearing record is going to be open. If anyone has suggestions and would like to make those suggestions to our subcommittee, we can include that in our transcript of our hearing, and it will have an important effect on the work that we are doing

Thank you all for being here. The hearing is adjourned.

[Whereupon, at 12:20 p.m., the hearing was adjourned, subject to the call of the Chair.]

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

TESTIMONY OF
EDWARD I. KOCH
MAYOR OF THE CITY OF NEW YORK

BEFORE THE
SUBCOMMITTEE ON ENERGY, NUCLEAR
PROLIFERATION, AND GOVERNMENT PROCESSES
OF THE
SENATE COMMITTEE ON GOVERNMENTAL AFFAIRS

NEW YORK, NEW YORK
SEPTEMBER 4, 1986

Mr. Chairman, members of the Subcommittee, thank you for the opportunity to speak to you on the planning for the 1990 Census. I am encouraged by your interest in the perspective of large cities like New York, and I will try briefly to outline that perspective.

I have three purposes here: to call your attention again to the extent of the undercount of New York City in the 1980 Census, to offer some explanations for the undercount, and to convey its political and economic consequences.

The extent of the New York City undercount in 1980 was truly dramatic. The Census Bureau itself estimated the undercount to be about 524,000 people. This number exceeds the number of people _counted_ in many large cities -- Seattle, Denver, and St. Louis, to name just three. It is as if a major city were altogether overlooked by the Bureau.

The _rate_ of the undercount for New York City was far out of line with the rate nationally. The City rate was 7.4 percent; the national rate was only 1.6 percent.

Why was the City undercount so disproportionate? There are a number of contributing causes. Some of these apply equally to other central cities; others apply uniquely to New York City. I hope that identifying these causes will give you some sense of how difficult it is to take the Census in a city like New York, and also how quixotic it is to think that "coverage improvement" techniques -- without statistical adjustments -- will adequately deal with these problems.

One contributing cause is that most housing in New York City, as in other cities, consists of apartments. As you know, the use of Census questionnaires for apartments is unreliable, particularly for low-income apartments. In many instances, the name of the addressee is unknown; in others, the apartment number is unknown. In such cases, the questionnaires are frequently left in the lobby and it is only serendipity that they reach the addressees. The Bureau simply does not have enough information about this population to make sure that they receive the questionnaires

A second problem is New York City's undocumented aliens, who are obviously reluctant to respond to a government agency's request for personal information, fearful that their immigration status will be discovered. According to the Census Bureau, only 200,000 of the City's undocumented aliens were counted in the 1980 Census. Yet the number of undocumented aliens in the City has been estimated by INS and by the City's Department of City Planning to be as high as 500,000 to 750,000.

A third problem is New York City's large transient population, many of whom live in rooming houses and SROs. Some of these transients are not mentally capable of responding to the questionnaires; others are afraid that responses to such government inquiries will jeopardize their public assistance. As with the case of undocumented aliens, there are strong individual motives operating here to discourage cooperation with the Census Bureau.

A fourth problem is the number of New Yorkers who cannot read and write English. Not only is there a sizable Spanish-speaking population; there are 20 languages used in this City by at least 10,000 people each. Although in 1980 the Census Bureau developed questionnaires in some of these foreign languages, it did not do nearly enough to reach the City's foreign-language population. I should point out, parenthetically, that there are also a number of English-speaking people who cannot read and write well enough to complete the questionnaires.

A fifth problem is the large number of families who, because of the shortage of affordable housing, are forced to share single units. Frequently, they are reluctant to disclose the total number of people living in an apartment because the shared occupancy is illegal; they fear that disclosure will result in eviction.

A final problem is the existence of high crime areas in the City. Many Census Bureau enumerators are simply frightened away.

In all these ways, New York City is resistant to a fully accurate count.

The effect of the undercount has been devastating. First, it has cost the City its full share of representation in Congress and in the New York State Assembly. What that means is that we have not been fully represented in political decisions which fundamentally affect us. As the City's Corporation Counsel, Frederick A.O. Schwarz, Jr., will discuss later this morning, this is not only unfair; it is also unconstitutional.

Second, the City has lost between $26,000,000 and $52,000,000 annually in federal funds under certain programs with formulas tied to population. Over a period of 10 years, this translates into a loss of up to half a billion dollars in services to New Yorkers. We have also lost state funds under programs similarly tied to population.

A final consequence is that our own ability to develop programs and policies to improve the City has been diminished. Without accurate Census data, the City's efforts to distribute fairly its basic services -- housing, education, sanitation, health care, and police and fire protection -- are necessarily undercut.

We recognize that the Census Bureau allocated considerable resources to improving its count in the 1980 Census, and that it plans to allocate additional resources for 1990. But we believe that many of the problems in covering a population like New York City are intractable ones, and that only through the use of statistical adjustments can there be a complete count.

I hope that the Subcommittee will take steps to insure that the Census Bureau amends its procedures and, in any event, makes its proposed 1990 procedures public as early as possible. This notice will permit cities like New York to provide comments on the procedures and will enable the Bureau then to incorporate appropriate changes.

In closing, let me stress that the City stands ready to assist the Bureau in taking the 1990 Census. We realize that cooperation by localities is essential in a project of this kind, and we will provide it.

Again, thank you, Mr. Chairman, for organizing this hearing and for permitting the City to speak on this important matter.

STATEMENT OF THE DIRECTOR OF THE BUREAU OF THE CENSUS
JOHN G. KEANE
BEFORE THE SUBCOMMITTEE ON ENERGY, NUCLEAR PROLIFERATION,
AND GOVERNMENT PROCESSES
COMMITTEE ON GOVERNMENTAL AFFAIRS
U.S. SENATE
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Introduction

Thank you, Mr. Chairman, for this opportunity to discuss the Census Bureau's plans for enumerating urban areas in the 1990 census. At the hearing on July 1 in Mississippi, I testified on some of the problems we have in the more rural areas of the country. One reason the census is so complex and challenging is that we are a large and diverse Nation. The Census Bureau must address the needs of all sections of the country. This hearing is an indication of your commitment and interest in making the census a success throughout the land. I commend you for that commitment.

I will describe some of the difficulties we have had enumerating urban areas in the past and how we are addressing those problems for 1990. But first, I want to outline our efforts to work closely with all local officials to make the 1990 census a success. While a perfect census is not possible in such a complex and highly mobile society as ours, we can, if we all work together, take a high quality census--one that everyone agrees is the best job possible.

One of the best ways for us to make sure we have a good census is for the Census Bureau to work closely with local officials. That means getting ideas from local officials about how to improve the census in their areas and obtaining their help in achieving widespread public support for the census. Mayors have a wealth of knowledge about their communities and a closeness to the people in those communities. Thus, for the 1990 census, we have included special efforts to establish contacts with mayors and other city officials.

In early June of this year, we held a week-long conference in Washington, D.C., on the topic of "Cities and the 1990 Census." During the first 3 days, we met with mayors and staff from 29 cities that had populations of 200,000 or more. In the final 3 days, a second conference was held with representatives from 26 cities with smaller populations. The discussions focused on the importance of the 1990 census to the cities and how we could cooperate to ensure that our Nation's Bicentennial Census will be the most accurate ever.

We also met with mayors at the annual meeting of the U.S. Conference of Mayors in Puerto Rico in June. And we will conduct workshops at the fall meetings of the National Association of Towns and Townships, the International City Management Association, and the National League of Cities. These forums will provide opportunities for both formal and informal discussions with other mayors.

At the center of our efforts will be a series of one-on-one meetings with mayors of our larger cities. In June, I visited New York City to meet with Mayor Koch. We discussed our mutual concerns about the 1990 census and possible joint efforts for encouraging the City's population to be counted in 1990. This was an excellent meeting and I am very encouraged by our discussions. Deputy Director Kincannon, at the meeting of the U.S. Conference of Mayors, had similar discussions with mayors from Chicago, Philadelphia, San Juan, and other cities. Over the next six months or so, we plan to meet with mayors of other cities. In order to assure ongoing contact between the cities and Census Bureau staff, we will ask the mayors to appoint high-level liaisons. We are committed to working with the cities to prevent foreseeable problems in the 1990 census and to be able to solve any unforseen ones as they arise.

Enumeration Problems in Urban Areas

I will now describe some of the things that can make census-taking in urban areas difficult. Most of our large urban centers pose the same sort of complexities, although the degree of complexity and the specific problems may differ from city to city. I will briefly mention four problems: mail-return rates, personnel, the complexity of living situations, and coverage of minority populations.

First, mail-return rates. In the 1980 census, our larger cities tended to have lower mail-return rates than the national average--about 76 percent as compared to 83 percent for the whole country. A few urban census offices had mail-return rates below 70 percent. Lower mail-return rates mean larger workloads in our nonresponse follow-up operation and, thus, greater costs and more time to complete the census. Many factors contribute to the failure to mail back a census form. These can include not receiving the questionnaire, not being able to fill it out, being away from home, being busy or apathetic, or being unwilling or afraid to cooperate with the Government.

Second, personnel. We tended in 1980 to have more problems in recruiting and retaining sufficient numbers of census workers in some urban areas. In part, this was because of greater competition for workers from other employers and, in part, because of the difficulty of personal-visit enumeration in some areas.

Third, the complexity of living situations. Large cities have greater concentrations of multiunit buildings, where there are sometimes mixups in questionnaire delivery. Mixups occur in buildings without clear unit designations or when the mail carrier gives the questionnaire designated for Apt. 1 to Apt. 2, etc. When questionnaires get mixed up, we cannot easily recognize which apartments we counted and which we did not. This situation is not confined to large buildings. Smaller buildings, such as those that have been converted from one-family units to two or three housing units, can be a problem if there are no apartment designations. Another difficulty is that there are smaller households in the large cities, so that follow-up enumerators often cannot find anyone at home. There also tend to be more special places in cities. Special places include college dormitories, hospitals, nursing homes, transient quarters, and so forth. In addition, we must plan special procedures to count the persons in our cities who have no usual living quarters.

Fourth, we tend to miss minorities at a higher rate than the general population. Many cities have large minority populations and we must take extra steps to try to cover those populations well. In addition, we must work hard to get across our message: that the census is important and that answering the census will not harm anyone.

Because of these problems and because our coverage evaluation studies over the years had shown higher undercount rates for Blacks and Hispanics than for the total population, several cities (as well as States, organizations, and persons) sued the Census Bureau during and after the 1980 census. Some of these were large cities, but others were quite small. Many of these suits were aimed at having the census counts adjusted. The Census Bureau's official position regarding the 1980 census is that we cannot adjust the census counts because our coverage evaluation studies do not provide us with information accurate enough to adjust. We have embarked on a dual strategy for the 1990 census: We will attempt to take the best census possible and to count everyone, but we also will do what is necessary to be prepared to adjust the counts if we determine that adjustment will improve them.

First, I will discuss our efforts to improve census procedures. Then, I will briefly describe our position on adjustment for the 1990 census.

I will discuss our 1990 census planning efforts in five areas: (1) encouraging a good mail return, (2) improving coverage, (3) automation, (4) recruiting, retaining, and managing personnel, and (5) joint ventures with local governments.

Encouraging a High Mail Return

The first topic I will address is how we will attempt to achieve a high mail-return rate in the 1990 census. As in 1980, we will again use the mail-out/mail-back census method for most areas of the country, containing over 95 percent of the population. We will prepare an address list and mail or deliver questionnaires to each housing unit on the list. We will ask householders to complete the questionnaires and mail them back to us on or about April 1, 1990. In this way, we can complete most of the census by mail and limit the amount of costly followup. We can, that is, if we have widespread public cooperation.

The first thing we need to do to assure public cooperation is to make it easy for people to complete and return the questionnaires. The questionnaires can be filled out at home and mailed back to us using the enclosed stamped and pre-addressed envelope. We keep questionnaire length reasonable by asking only those questions that are required to meet well demonstrated public needs or that are required to fulfill legal mandates or implement governmental programs.

There will be no increase in the length of the questionnaire for the 1990 census. We are conducting research into the design, format, and wording of the questionnaires and other components of the questionnaire mailing packages.

As in past censuses, we will offer assistance to people who need help in filling the census questionnaire. We will include a telephone number on the questionnaire so householders can call for help. We will provide census enumerators with translations of the census questionnaires in various languages (33 languages in 1980). And we are looking at the possibility of increasing the number of storefront, walk-in centers. These could be set up in areas of special need, such as areas where there are large numbers of people who do not speak English well. Our experience in past censuses has been that walk-in centers received little traffic. In part, this is because of the difficulty of publicizing the location and hours of operation of numerous sites. If we use walk-in centers in 1990, we have to find ways to better publicize the centers.

The second thing we need to do to assure public cooperation is to again have a successful outreach and promotion campaign. The 1980 promotion campaign was quite successful and certainly contributed to the high mail-return rate of 83 percent. The promotion campaign will stress the importance and confidentiality of the census and how to participate in it. Research conducted after the 1980 census found that the public information campaign stimulated cooperative mail response behavior.

We have established an even more extensive outreach and promotion plan for 1990 and have begun to implement parts of the plan. I will sketch some of the highlights of the plan.

We have decided to pursue a public service advertising campaign through the auspices of the Advertising Council. In 1980, the efforts of the Advertising Council and its volunteer advertising agency, Ogilvy and Mather International, Inc., led to the donation of $38 million worth of time and space by the Nation's media. In addition to the efforts of the Advertising Council's selected volunteer ad agency, we will ask the Advertising Council to obtain the services of minority advertising agencies to work with the volunteer agency to develop materials and messages directed to minority groups.

In addition to the large-scale advertising campaign, we will establish many other efforts to gain support for the census. We will ask Members of Congress to help us educate their constituents about the census through the media channels that are available to them; encourage news items and feature stories in newspapers and magazines; and form a "Broadcasters Census Committee" to undertake special efforts to assure that the census messages, tailored to meet local needs, are publicized on radio and television. For example, the broadcasters' committee might obtain the assistance of local celebrities in taping promotional spots. We will produce or encourage the production of bumper stickers, decals, buttons, posters, messages on monthly utility bills, and so on; ask trade associations, businesses, and service organizations to use their communications facilities to promote the census; and obtain private sector support in underwriting selected promotion projects. And we will undertake activities that will emphasize the fact that the 1990 census will be the Bicentennial Census of the United States.

We will make special efforts to promote the census at the grassroots level, through the schools, religious organizations, and community groups. We will discuss our outreach program plans with community organization leaders to determine how we can improve our plans for implementation in their communities.

We also are exploring two ways of getting promotional messages directly to each household: motivational inserts and mail reminder cards.

Research conducted after the 1980 census showed that for some people, the arrival of the census mailing package was the first time they had heard about the census. Thus, the census mailing package itself is a public information vehicle and can be a critical source of information. In the 1986 censuses in East Central Mississippi and in Central Los Angeles County, we redesigned the questionnaire covers and envelopes to be more attractive and colorful than those for the 1980 census. We also are evaluating the effects of including a motivational insert in some of the questionnaire mailing packages. The test is designed to see whether a brief written appeal for cooperation can improve mail-response rates, lower question nonresponse, and increase cooperation with follow-up enumerators. We also are looking at whether this general-purpose insert has comparable effects for various population subgroups. The insert included red, white, and blue graphics and listed six reasons "to count yourself in on the census." We expect to have preliminary results from this study soon.

We also have been testing the effect of sending out reminder cards targeted to housing units for which questionnaires are not returned. We tested this in the 1985 Census of Tampa, Florida and in our 1986 test censuses.

We have learned that there are serious logistical, workload, and timing problems involved in doing targeted mailings of reminder cards. To do targeted mailings, we must wait several days for the initial mail returns; then we must create a file of housing units for which questionnaires have not been returned, generate address labels, label the reminder cards, and mail them out early enough to get responses back before the beginning of nonresponse followup. We could avoid this problem if we mailed cards to every unit, rather than targeting them, because we could label the cards in advance of Census Day. We are planning to conduct a blanket mail-out for the entire country. We will mail census questionnaires about a week earlier than for the 1980 census and would send out the reminder cards shortly before Census Day. If we determine that the blanket mail-out is not cost-effective, then we could decide to do the blanket mailing to selected areas, particularly the harder-to-enumerate areas of the country. We are also examining the costs and benefits of a second mail reminder card after Census Day (most likely a blanket mail-out to selected areas).

Improving Coverage

The second issue I will discuss is improving coverage. All of the other topics I am discussing--such as the outreach and promotion program, questionnaire assistance, other efforts to encourage mail response, increased automation, personnel, and joint ventures with local government--relate in some way to census coverage. But we also have a number of special programs designed specifically to improve coverage. Generally, we divide our coverage improvement operations into two broad categories--those designed to make sure we have the most complete mailing list possible and those designed to improve coverage after the census questionnaire has been delivered. I will talk about the mailing list first.

A mailing list that is as complete and accurate as possible is important if we are going to conduct a good census. We use the mailing list to control the enumeration by mailing questionnaires to each housing unit on the list and monitoring the mail returns to determine whether a questionnaire has been returned for a particular unit. We start by constructing the best possible mailing list. Then we update it during the census so that at the end of the census we have a list of addresses that is as complete and accurate as possible. Once a housing unit is included in our address list, we stand an excellent chance of completing the enumeration of that unit and its inhabitants.

We conducted the Address List Compilation Test in 1984 to explore several methods for compiling the original mailing list for both urban and rural areas. In the urban test sites, we compared three initial list sources: (1) a list compiled for us by the U.S. Postal Service, (2) the final list of addresses from the 1980 census, (3) and a list purchased from a commercial vendor. (We used the latter as the initial list in 1980.) We updated each of these three initial list sources through postal service checks and checks by our own staff.

Based on the results of this test, we have decided to again use vendor lists as the primary mailing list source in urban areas in 1990. The 1980 census lists may be an acceptable alternative or supplement to vendor lists in areas where no vendor has a list or the vendor list does not meet our quality standards. Thus, we are considering selective use of the 1980 list.

In addition to looking at our initial mailing list sources, we have been testing different methods for updating the address list. We realize that the commercial vendor list we purchase for urban areas will not include every address we need. Thus, we will put the list through several checks by the U.S.P.S. and our own enumerators, as we did in 1980.

The check that our enumerators conduct is called "precanvass," and we have tested changes that could improve the precanvass operation in 1990, particularly for multiunit buildings. In the 1980 census, precanvass enumerators were given an address register that contained listings only of basic street addresses. For multiunit structures, only the number of housing units in the basic street address was included in the registers. As enumerators canvassed their assignment areas, they verified that the number of units listed for each basic street address was correct, added missed basic street addresses, and deleted addresses that did not exist or were not for residential units. The enumerators only inquired extensively at multiunit structures for which they found more units than the number listed in their registers.

For 1990, we have been testing a new unit-by-unit precanvass operation. Under this new procedure, we give enumerators address listings for each housing unit, including apartment designations for multiunits. The precanvass enumerators are instructed to verify the apartment designation for each unit listed. The enumerators do not need to visit each individual unit, but only to visit each structure and inquire about apartment designations from a knowledgeable respondent. By improving apartment designations on our address lists, this operation could improve questionnaire delivery in multiunit structures and reduce delivery mix-ups.

Now, I will turn to those census operations designed to improve coverage after the census questionnaires have been delivered. We employed a number of such procedures in 1980 and will use most of them again in 1990. In our test censuses, we are working to refine the procedures. I will briefly discuss just a few of these operations here.

One of the coverage-improvement operations, called the "vacant and delete check" or "unit status review," is based on our previous experience that shows that the enumerators' misclassification of occupied housing units as "vacant" can cause a coverage problem. Enumerators identify some units as vacant when they visit addresses for which questionnaires are not returned. For the 1980 census, every vacant unit was visited by a second, independent enumerator who verified the occupancy status of the unit. This recheck procedure also included units deleted as nonexistent by the initial follow-up enumerator. We plan to conduct this procedure again in 1990.

As a further attempt to improve the coverage for minority populations, a new program--the Nonhousehold Sources Check--was added in 1980. This check was performed in selected census tracts with significant minority populations. The check consisted of a match between the census records and lists of names and addresses from administrative sources such as drivers' license lists. Census enumerators tried to contact persons on the independent lists who were not recorded in the census at the same address to see if each person should have been enumerated. For 1990, we are examining the potential for using more lists, besides drivers' license lists and better targeting the program to areas where it is most likely to be effective.

As in 1980, we will conduct several special programs to count persons who are living away from their usual residences on Census Day, are living in group quarters, or who have no usual residence. For example, we will conduct special visits to hotels, motels, missions, and flophouses to count permanent residents of these facilities; or persons visiting the facilities who have no one at their usual residence to complete the enumeration. We conduct another operation in which enumerators canvass places frequented by persons with a higher than average probability of being missed by the census--city parks, pool halls, theaters, train stations, etc. We also will carry out a special "Were You Counted?" publicity campaign after Census Day.

We also include questions on the census questionnaires designed to obtain complete coverage of a household's inhabitants. We are conducting studies to improve the effectiveness of these questions.

As I mentioned earlier, we will provide assistance in filling the census questionnaires and translation of the questionnaires in various languages for use by the follow-up enumerators. In 1980, respondents could request a Spanish-language questionnaire by phone or by marking the appropriate box on the English questionnaire. There were relatively few requests for Spanish-language questionnaires. We are examining this procedure to see if we can improve it for 1990.

Finally, we again plan to conduct the Local Review Program, which we first introduced in the 1980 census as a coverage-improvement program. I will discuss this program later when I talk about joint ventures with local officials.

Automation

The third topic I will discuss is our automation plans for the 1990 census. As we have mentioned at previous hearings, one of our major goals for the 1990 census is to increase the use of automation. Automating many of the census tasks performed clerically during the 1980 census and beginning automated processing (particularly the conversion of questionnaire data into computer-readable form) earlier than in 1980 will help us release data products in a more timely manner, improve accuracy, and give us more control over the entire census process. A new automated geographic support system, which we call "TIGER," also will contribute greatly to improving the census.

For 1990, we are going to begin data conversion about 5-7 months earlier than we did for 1980; this will mean that we will be doing processing concurrently with data collection. There are many benefits to concurrent processing. For example, it will allow us to identify and correct problems with the data early in the census process and it will help us to meet our goal of releasing data products in a more timely manner.

Concurrent processing is made possible by an automated address control file, which is another automation advance we will employ in 1990. An automated address control file allows us to do flow processing because each questionnaire can be electronically tracked through its unique identification number.

In 1980, our address control and data conversion systems required that we process all questionnaires from a district office as a unit. As a result, all the district office's data collection work needed to be completed before any questionnaires could be shipped to one of three processing centers. This meant that many completed questionnaires that could have entered the data conversion phase remained in the district offices for several months.

In April of this year, we reached some preliminary decisions about how we would configure our processing and district (or collection) offices to implement concurrent processing. The crux of these decisions is that district offices in many of our larger urban centers will not have to be responsible for questionnaire check-in, editing, and other clerical tasks; thus, they can concentrate instead on data collection and follow-up activities. The district offices will be responsible largely for following up on nonresponding housing units and those for which additional information is needed. One of the reasons we made this decision is to ease the staffing needs in urban areas. For these areas, which include most of the large, harder-to-enumerate urban centers, and some adjacent areas, we will ask householders to mail back their questionnaires to a processing center rather than to the district office. In the processing center, the questionnaires will be automatically checked in, the data converted into machine-readable format, and edited by computer.

For the rest of the country where we expect higher mail-return rates and fewer staffing problems, we also will be doing concurrent processing, but we will implement it somewhat differently. In order to reduce equipment and personnel needs for the processing centers, we will ask householders to return questionnaires to the district offices. In the district offices, we will check in the questionnaires automatically and will perform clerical edits, rather than computer edits. Once questionnaires are determined to be complete, they will be sent on a flow basis to a processing center for conversion into computer-readable format and computer edit.

Personnel

The fourth topic I will discuss is recruiting, retaining, and managing temporary census personnel. In 1980, we hired some 460,000 persons throughout the census, with some 270,000 working at the peak of operations. Even with increased automation in the census, we still will need an army of temporary census employees. Because of the increased automation, many of these employees will need to be more skilled than 1980 census workers. Another important recruitment issue in addition to the sheer numbers and skill levels of workers, is our policy of hiring indigenous enumerators wherever possible; that is, enumerators who live in the area they are assigned, who are familiar with the area, and who speak the prevailing languages.

We will need to put a great deal of effort into recruiting these temporary workers. That will mean publicizing census jobs through our regular census outreach and promotion channels, employment offices, community groups and organizations, and so on. We will make a special effort to have national organizations, such as those for teachers and retirees, publicize census jobs through their communications networks. We may consider utilizing paid newspaper advertising more extensively than in

1980; if so, we will want to conduct research to make the advertising as effective as possible. In our test censuses, we have experimented with mailing recruitment notices to households in areas where hiring is lagging. These mailings do seem to increase hiring; but, as with mail-reminder cards, we must weigh the benefits against the costs.

In addition to our concerns about recruiting census-takers, we are looking at better ways to motivate and manage them. For the 1986 test census in Central Los Angeles County, persons selected for nonresponse follow-up enumerator positions attended a motivational briefing. Using videotapes and slides, we stressed the importance of the census and of the enumerators' role in it, its history, and confidentiality. The ceremony concluded with a mass swearing in of the enumerators. Reactions to the briefing were very positive and it seemed to foster good morale among the enumerators. We are exploring the possibility of conducting briefings in some urban areas in 1990.

In both Los Angeles and Mississippi, we restructured enumerator training so that after a morning of classroom instruction the enumerators were sent out into the field to complete questionnaires. Then they came back to the classroom the next morning to share their experiences and to get further training. This allowed the enumerators to have early exposure to field work, a chance to apply what was learned in the classroom, and help in solving any problems. We plan to continue using this approach.

We also instituted a new way to pay enumerators for training. In past censuses, we found that many persons would attend training, for which they were paid an hourly wage about equal to what they would earn while working; but then they would not accept an assignment. Thus, we had invested money to train them, but received no work from them. In the 1986 test censuses, we paid enumerators the minimum wage during training but gave them a supplemental payment when they took an assignment and completed 10 acceptable questionnaires (or about a day's work.) The supplemental payment was the difference between the minimum wage and the regular hourly wage for the enumerators. The supplemental pay plan worked well in the 1986 tests, and we probably will use this approach in 1990.

Another innovation for the 1986 censuses was an incentive pay plan. The purpose of this plan was to give enumerators an incentive to meet production goals and stay on the job. Incentive payments were based on the amount of quality work completed. To be eligible for the incentive payments, nonresponse enumerators had to accurately complete an average of 1 1/2 questionnaires per hour (or 12 per day) and stay on the job until the completion of the nonresponse follow-up operation. Crew leaders also could earn incentive payments based on the work of their crews. We are examining the feasibility of including an incentive pay plan in the 1990 census.

We have implemented several other new procedures in our test censuses that could improve personnel management in the 1990 census. These include: (1) Daily meetings between crew leaders and enumerators and daily progress and payroll reporting; (2) required edits by the crew leaders of the enumerators' work; (3) "storefront" offices, where crew leaders can meet with their enumerators and edit their work in a secure area; (4) an automated management information system that will provide quick feedback on the course of operations both for district office supervisors and managers at the regional offices and at headquarters; and (5) use of an automated qualified-applicant file to perform centralized selection of persons to attend training sessions.

We believe that these and other innovations we plan in our personnel system will lead to improvements for the 1990 census. We are very encouraged by the results of the 1986 censuses. In East Central Mississippi, we completed nonresponse followup a week ahead of schedule, and in Central Los Angeles County, despite a low mail-return rate, we completed nonresponse followup virtually on schedule. The success of these operations is attributable to the combined effect of the motivational sessions, improved training, incentive payments, better control of the enumeration, and more timely and accurate management reports.

Joint Ventures with Local Governments

Now, I want to return to the topic I opened with--joint ventures with localities. In the 1980 census, we established two new programs designed to get help from local officials to improve the census. These were the Complete Count Committee Program and the Local Review Program, both of which we plan to repeat for the 1990 census. Our discussions with big city mayors will certainly include, but will not be limited to, how to make these two programs more successful.

Under the Complete Count Committee Program, we asked elected officials to form committees of local leaders representing a cross-section of the community. Some 4,000 communities established such committees. The committees developed campaigns to stress the importance of accurate census counts to their citizens and to encourage everyone to complete the census questionnaire and return it promptly. The committees conveyed their messages through many channels, including parades, posters, brochures, television and radio messages, and so forth. The efforts of the complete count committees are an important and necessary supplement to our outreach and promotion campaign. A creative complete count committee can find ways to localize the national advertising campaign to appeal to the people in its area.

We want this program to be more successful in 1990. In 1980, while many of the committees were quite energetic and creative, only about 10 percent of eligible jurisdictions formed committees. We hope to see expanded efforts for 1990. We plan to provide local government officials with a handbook of ideas and suggestions for promotional activities. Ultimately, the success of the committees will depend on the level of local effort, and this is a point we will emphasize in our meetings with the mayors.

The 1980 census Local Review Program gave local officials in over 39,000 jurisdictions an opportunity to review aggregate census counts before the temporary census offices closed. The purpose of the program was to detect and correct possible errors while our temporary local offices were still functioning. About 12,400 jurisdictions participated in the program. Local officials noted any discrepancies between the census counts and their own data, and we checked the counts and made corrections, as necessary.

We want to improve this program for the 1990 census. We are working on a design that will give local officials two opportunities to review the counts: they can review counts of housing units before Census Day (in most jurisdictions), and then review actual census counts of housing units when most of the census operations have been completed, but before the offices have closed. In 1980, we had only the post-Census Day review. The pre-Census Day review will help us have the best possible mailing list. As I mentioned earlier, once a housing unit is included on our mailing list, we stand an excellent chance of completing the enumeration of that unit and its inhabitants. We expect to begin contacting local officials earlier than for 1980 to give them more time to prepare their own data sources. And we are asking state agencies to give training sessions to help the localities get ready for the program. State Data Centers and/or Federal/State Cooperatives for Population Estimates in most states have expressed a willingness to conduct these training sessions and to provide other types of assistance. We are very grateful for their offers of assistance.

There are other areas where we will need the aid and cooperation of local officials. They can help us meet our staffing goals by suggesting sources for qualified workers and by helping us publicize the fact that we are looking for workers. The localities also can help us meet our needs for space for testing and training enumerators, for assistance centers, and so forth. Traditionally we have relied on donated space to meet these needs.

Adjustment

Now that I have discussed improvements that will help us take the best possible census in 1990, I will turn to the second part of our dual strategy: adjustment. We have undertaken a rigorous program of research, testing, and evaluation of the various issues related to adjustment for the 1990 census. To be able to adjust, we have to do four things: (1) We have to establish methodologies to measure coverage accurately; (2) we have to develop acceptable statistical techniques to estimate coverage for small geographic levels and for a variety of population and housing characteristics; (3) we have to establish and publish standards for evaluating the quality of the adjusted and unadjusted data; and, (4) we have to implement the adjustment, compare the adjusted and unadjusted data in light of the standards, and then release one of the sets of data as the official 1990 census results.

In early 1987, we will decide on the statistical and operational feasibility of adjustment. This is not a decision about whether the adjusted numbers will be the official 1990 census counts. What appears feasible in 1987 may or may not be feasible in 1990. If we determine that adjustment is not technically feasible, then we would not go ahead with a full-scale adjustment program. We would likely propose a smaller, less costly undercount measurement program for the purposes of evaluation, not adjustment. If the decision is that we are statistically and operationally capable of adjustment, then we will plan work to permit adjustment. We will release the adjusted figures unless the final results do not meet technical standards that we are currently developing.

We are developing and will announce well in advance of the census the standards we will use to assess whether the census counts or the adjusted figures are better. We want to reach a consensus among various stakeholders in advance of the 1990 census on the criteria for judging the relative quality of the adjusted and unadjusted figures. We are developing standards for both methodologies of estimating census coverage error--the post-enumeration survey and demographic analysis. These two methodologies are very different and require different standards. We continue to conduct research into census adjustment standards and plan to distribute the results of this research in the spring of 1987.

We could not conduct the census without widespread support for our plans and goals. Neither can we contemplate adjustment without establishing a consensus of support for our techniques and standards. We have consulted extensively with a wide range of interested individuals and groups. After the publication of our preliminary census adjustment standards early next year, we will hold a number of public forums to discuss the standards and other issues related to adjustment. In October 1987, we will publish the proposed standards in the Federal Register and review any comments we receive. In May 1988, we will submit materials on the proposed census adjustment standards for review by our Congressional oversight committees.

Finally, I will discuss the decision to adjust the census. There are two main parts to the overall decision process:

First, if the 1987 decision is that adjustment is statistically and operationally feasible, the machinery will be put in place. Coverage estimates will be made and population and housing estimates adjusted for an undercount will be produced. We will only release the adjusted data if it can be shown that the adjustment figures are more accurate than the unadjusted counts. The 1987 adjustment decision will essentially represent the Census Bureau's judgment, at that time, about whether to prepare adjusted estimates.

Second, in December 1990 or as soon as the coverage measurements have been obtained, we will evaluate the measurements in light of the specified technical standards. This evaluation will be looking for any substantial unforeseen errors that might have occurred or other unanticipated serious flaws in the coverage measurement process that would cause us to view the adjusted data as less accurate than the unadjusted data. Assuming the standards are met and such flaws have not occurred, we would release the adjusted data. But if our review indicates that serious errors occurred, then we would release the unadjusted data.

This is an ambitious goal. We may not be able to estimate coverage and adjust for the count and characteristics in every census block by December 31, 1990. If we do not meet that date, we do have fallback positions; but it would mean that there could be two sets of census results--the unadjusted numbers available on December 31, 1990 and an adjusted set available later.

In making the decision on adjustment, we will convene a group of key Census Bureau statisticians and demographers. In addition, we will work with the Committee on National Statistics' Panel on Decennial Census Methodology and to the Census Advisory Committee of the American Statistical Association augmented by some representatives selected from the Census Advisory Committee on Population Statistics. These experts will review the results of the census and the adjusted figures and make comparisons with the established standards. They will submit a report and recommendations to the internal technical group.

The internal technical group will consider the external experts' report and recommendations and will make recommendations to the Director of the Bureau of the Census. The Director will then make and issue the final decision.

The plan for determining whether to adjust has been designed to be independent of the judgment of only one individual. By developing standards that are agreed upon in advance, we are removing the need to trust the judgment of one specific person or any one concern. We believe that the decision must be based upon definite knowledge about the results of our coverage evaluation program and the quality of both the census and the evaluation. The key to this strategy is reaching consensus on the standards before the census is taken.

Closing

Mr. Chairman, I believe that if we are successful in implementing improvements in each of the five areas I discussed above--mail-response rates, coverage improvement, automation, personnel, and cooperation with local officials--we will have a good census in 1990, both in our urban areas and throughout the Nation.

As I have said at previous hearings, we want to make the Bicentennial Census the best ever, one that lives up to our Nation's proud heritage. We are a much larger and more complex society than we were at the first census in 1790. Then, only 5 cities had as many as 10,000 people. New York City, then as now the largest, had only 32,000 people. In the 1980 census, we had 2,903 places with over 10,000 inhabitants, 173 with over 100,000 people, and 22 with half a million or more.

Counting all these people is the Census Bureau's challenge and responsibility. But we cannot take a good census all by ourselves. To carry out our responsibility as efficiently and accurately as possible, we need the help of state and local leaders.

We have begun our outreach to city officials 3 years earlier than before the last census. We are committed to designing a program of local involvement and maintaining the broadest possible communication with city officials. Working together, we can take the best census possible for our urban areas.

Mr. Chairman, that concludes my testimony. I will be happy to answer any questions.

TESTIMONY OF
FREDERICK A.O. SCHWARZ, JR.
CORPORATION COUNSEL OF THE CITY OF NEW YORK

BEFORE THE
SUBCOMMITTEE ON ENERGY, NUCLEAR
PROLIFERATION AND GOVERNMENT PROCESSES
OF THE
SENATE COMMITTEE ON GOVERNMENTAL AFFAIRS

NEW YORK, NEW YORK
SEPTEMBER 4, 1986

I would like to thank the Subcommittee for inviting me to testify on the subject of the 1990 Decennial Census and, in particular, on the problems associated with counting the population in urban areas such as New York City.

As you have heard from Mayor Koch, the City will cooperate in every way it can, as it did in 1980, to assist the Census Bureau in conducting the 1990 Census in New York.

Other witnesses testifying today address the reasons why there is significant undercounting in New York City and other urban areas, and demonstrate that the coverage improvement procedures which the Bureau may implement can help but cannot solve the undercount problem.

The City's position since the undercount issue first came to its attention in the 1980 Census is that statistical adjustment of the Census is necessary to solve the inevitable undercount problem. Dr. Eugene Ericksen, who also is testifying today, demonstrates that the Census Bureau has the technical tools to make a statistical adjustment, and indeed that an adjustment is the only solution to the problem.

My testimony addresses the need for statistical adjustment as a matter of constitutional right, democratic ideal and political necessity.

The Census Bureau's own undercount studies of the 1980 Census show that the number of people missed in New York City -- approximately a half million people -- exceeds the number of people counted in many other large cities, including Seattle, Denver and St. Louis.

The disproportionate undercount in urban areas reflects the well-established fact that Census methods traditionally have disproportionately missed blacks, Hispanics, aliens, poor people, residents of high crime urban areas, persons with unconventional living arrangements, and persons whose English skills are weak or nonexistent. Without question, the disproportionate undercount in our cities will occur again in 1990.

The undercount figures on blacks and Hispanics should be particularly disturbing to a nation committed to equal political rights without regard to race and ethnicity. The Bureau's studies of the 1980 Census undercount, based on demographic data such as birth and death records, indicate that the net national undercount for blacks was about 6 percent (with black males aged 25 to 54 undercounted at well over twice that rate). Thus, the number of blacks who went uncounted in 1980 exceeded the total population counted in each of 16 states. In contrast, those studies indicate that nonblacks were undercounted by less than 1 percent. Bureau surveys also make clear that Hispanics are missed at rates comparable to those applicable to blacks, and that undercounting of both blacks and Hispanics is even greater in central cities than it is on the national level.

Huge undercounts exist in this country's already-beleaguered cities, such as New York, because such cities have not only a larger-than-average population of minorities, but also larger-than-average populations of aliens, poor readers and all the other groups that existing Census methods miss.

This means a loss of fair representation in Congress and in state legislatures. It means the misallocation and loss of millions of dollars in aid under federal (and state) programs because aid formulas typically are tied to population or a combination of population and income level. It also means that innumerable other decisions made by the public and private sectors on the basis of Census data are flawed by inaccurate data.

The Census Bureau has been dragging its feet in developing a methodology for statistical adjustment. It has squandered a great deal of energy and money on raising legal and statistical defenses to adjustment, only to have the courts, or statistical experts outside the Bureau, reject those defenses. The Bureau's history on this issue demonstrates that unless ordered to do so by the Congress or the courts, the Bureau will not be prepared to adjust for the undercount in the 1990 Census.

At the time that the City commenced its lawsuit against the Census Bureau to require it to statistically adjust the 1980 Census, the Bureau maintained that the United States Constitution required a "headcount" and that statistical adjustments to an actual count were prohibited.

The Court of Appeals for the Second Circuit, however, held that the Constitution required that the Bureau accurately determine the populations of the country and its geographical subdivisions "as nearly as practicable," and that statistical adjustments were not prohibited. Carey v. Klutznick, 637 F.2d 834, 839 (2d Cir. 1980).

The Second Circuit's decision noted that if a Census resulted in a disproportionate undercount of minorities in areas such as New York where they are heavily concentrated, and there was no adjustment, there would be a violation of the Constitution's plain objective to make equal representation for equal numbers of people the fundamental goal. Carey v. Klutznick, 637 F.2d at 839, citing Wesberry v. Sanders, 376 U.S. 1, 7-8 (1964).

The Bureau also has attempted unsuccessfully to argue that a provision of the Census Act, 13 U.S.C. § 195, prohibits using sampling and statistical procedures for the Decennial Census. But another section of the Act, 13 U.S.C. § 141(a), plainly authorizes the Bureau to include "the use of sampling procedures and special surveys" as part of its Decennial Census-taking procedures. Thus, as held by a U.S. District Court, the Bureau is prohibited only from relying solely on sampling for the Decennial Census. See Carey v. Klutznick, 508 F. Supp. 404, 415 (S.D.N.Y. 1980).

Now, the Bureau asserts that statistical adjustment would somehow politicize the Census.

This argument represents a failure of faith in the good sense of the American people and a failure to study the lessons of American history.

The Bureau's position ignores the fact that failure to use available statistical methods to improve the raw count -- which itself rests on methodological choices and is known to contain serious bias against the politically weak -- politicizes the Census. Once New York City's 1980 lawsuit moved the systematic undercount out of the academic papers of experts and into the public arena, the cat was out of the bag. Indeed, what could do more to make the Census a subject of political controversy than knowledge that, under existing methods, major cities, the poor, minorities and other groups that tend to be both politically under-represented and most in need of aid to education and other governmental programs, are being knowingly deprived of a fair share of political representation and financial assistance? In addition, how realistic is an argument that the American public, fully accustomed to the use of statistical techniques in polling, for example, would rebel against the use of statistical techniques -- based upon a vastly larger data base -- to improve the results of the Census?

Despite the Bureau's concerns, a fair review of the history of American democracy makes a compelling case for action to correct the injustices of knowing under-representation of the least politically powerful people in the country and the governmental jurisdictions in which they reside.

Since 1776, our democracy has moved step by step to remove barriers to fair and equal representation. We fought for independence under the banner of "no taxation without representation." We fought a civil war resulting in constitutional recognition of the right of blacks to vote and to be counted as whole persons. In 1920, women were given the right to vote. In the 1960's, the Supreme Court -- rejecting a "political thicket" argument quite similar to that used by the Census Bureau today -- held that the Constitution required representation based upon one-person-one-vote and that malapportionment of political districts was unconstitutional.

Today, because of the systemic inaccuracies of the Census, areas like New York City are in fact being taxed without fair representation. Today, blacks (and other minorities) are still counted in the Census as less than whole persons. Today, the one-person-one-vote doctrine is mechanically applied to data that are known to be inaccurate and to be skewed against the urban poor.

With the bicentennial of our Constitution approaching, it is time to agree upon fixing the systemic Census errors, righting these wrongs, and thereby taking one more step toward realization of the American democratic ideal of fair representation.

Since the Census Bureau appears unwilling to implement statistical adjustment as an integral part of the Decennial Census, then Congress or the courts should make that decision. The Decennial Census constitutes a key instrument for the allocation of political power under the Constitution. An accurate Census implements the constitutional plan for the direct election of the House of Representatives "by the people of the several states" with representation apportioned among the states "according to their respective numbers" (Article I, Section 2; Amendment 14, Section 2). An accurate Census implements the Great Compromise accommodating the conflict of interest between the original states, large and small. It also is a tool for readjusting political power as "new states may be admitted by Congress into the Union" (Article IV, Section 3) -- a continuing process necessary so that all states are admitted on an equal footing. The allocation of Electoral College votes (Article II, Section 1), and hence the allocation of power in Presidential elections, also depends on a complete Census. And the accurate performance of the Decennial Census is the foundation for the constitutional guarantee of equal votes for equal numbers of people, and thus the integrity of the very cornerstone of political democracy.

As already discussed, Article I, Section 2, as amended by Section 2 of the Fourteenth Amendment, requires that apportionment of Representatives among the states must be based upon "the whole number of persons in each State," so that Congress may be apportioned, "as nearly as is practicable," in accordance with the one-person-one-vote constitutional requirement. See Wesberry v. Sanders, 376 U.S. 1, 7-8 (1964).

The standard adopted in Wesberry echoes the words of Daniel Webster, who wrote on the subject of apportionment among the states as follows: "That which cannot be done perfectly, must be done in a manner as near perfection as can be. If exactness cannot, from the nature of things, be attained, then the greatest practicable approach to exactness ought to be made." Senate Report, 22d Cong., 1st Sess., Doc. No. 119, pp. 4, 7 (1832).

The conduct of the Census has been delegated by Congress to the Census Bureau, which has inevitably become a vast bureaucracy, employing periodically more than 250,000 persons. Notwithstanding the critical function it serves in the constitutional plan, until the 1980 Census litigation, the actual work of the Census

Bureau had not been subject to the probing scrutiny that these cases have brought to bear on its operations. It seems fair to say that no other executive bureau -- and certainly none of comparable importance -- had been left so long to its own devices.

The 1980 Census brought not only the lawsuit by New York City but also suits by some 50 other states, counties, cities and even smaller jurisdictions, all complaining of inaccurate population counts. See Carey v. Klutznick, 653 F.2d 732, 735 n.10 (2d Cir. 1981). Most of these suits are still pending in the courts. If the Bureau fails to provide for adjustment, the 1990 Census may produce a new spate of lawsuits. For example, the Executive Director of the United Latin American Citizens testified to a House Subcommittee in 1984 that a coalition of groups concerned about the disproportionate undercount were contemplating a challenge to the 1990 Census unless the Bureau adopts procedures to adjust the next Census count.[1]

But the Census Bureau maintains its ambivalent stance on statistical adjustment. Just a few weeks ago, Barbara Bailar, the Bureau's Associate Director for Statistical Standards and Methodology, testified to a House Subcommittee that the Bureau has a dual strategy for the 1990 Census: (1) to take the best possible Census count; (2) "to be prepared to adjust the counts if we determine that adjustment will improve them." She said that in early 1987 the Bureau would decide on the statistical and operational feasibility of adjustment of the 1990 Census. Nevertheless, she also said that "what appears feasible in 1987 may or may not be feasible in 1990."[2]

Another obstacle to adjustment recently raised by the Census Bureau relates to undocumented aliens. The Bureau claims it does not know how to adjust the Census count for this population. Both the Census Bureau and the City agree that the Constitution requires that undocumented aliens be counted in the Census. In fact, we both were on the same side in another lawsuit brought in 1980, one that attempted to obtain a court order to exclude undocumented aliens from the Census count. In that case, the plaintiff, Federation for American Immigration Reform (F.A.I.R.), argued that the inclusion of undocumented aliens in the Census count is unconstitutional.

A three-judge federal court, while dismissing the case on jurisdictional grounds, found F.A.I.R.'s case "to be very weak on the merits." The court agreed with us that the language of the Constitution on the issue of who is to be enumerated "is not ambiguous." The court further noted that the City's and the Census Bureau's constitutional argument that aliens must be counted "is bolstered by two centuries of consistent interpretation" by Congress. F.A.I.R. v. Klutznick, 486 F. Supp. 564, 576 (D.D.C. 1980), appeal dismissed, 447 U.S. 916 (1980).

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[1] Testimony of Arnoldo Torres before the Subcommittee on Census and Population of the U.S. House of Representatives Committee on Post Office and Civil Service, April 4, 1984.

[2] Oral testimony of Barbara A. Bailar before the Subcommittee on Census and Population of the U.S. House of Representatives Committee on Post Office and Civil Service, July 24, 1986.

In addition, exclusion of undocumented aliens would create real unfairness in the handful of states, and the cities within those states' borders, where large numbers of undocumented aliens reside. Most states have few if any undocumented aliens. They experience no fiscal burden from the federal government's failure to enforce immigration laws effectively. On the other hand, five states -- California, New York, Texas, Florida and Illinois -- and cities therein, such as New York City, are the places of residence of most of the undocumented aliens in the United States. These states must provide police, fire, education, sanitation, health and other services to these aliens; but they have no power to prevent the entry of aliens into their states or to seek their removal.

Moreover, whatever the legal status of these aliens, both the Immigration and Naturalization Service[3] and former Attorney General William French Smith[4] have testified that the overwhelming majority of these aliens are in fact permanently residing in the United States and will never be deported. Thus, it is only fair that these states' representation in Congress, and their share of federal funds for providing governmental services, be based on the total population of those states, including all aliens who in fact are living there, whatever their immigration status.

The adjustment methodology the Bureau develops must include techniques for adjusting the count of undocumented aliens. Dr. Eugene Ericksen's testimony today on the feasibility of statistical adjustment demonstrates that the Bureau's assertion that it does not know how to adjust for undocumented aliens is simply more evidence of its ambivalence on the overall question of statistical adjustment.

Only a clear Congressional or judicial mandate will move the Bureau to complete its development of a statistical methodology in time for the 1990 Census. The City of New York urges this Subcommittee to spearhead legislation that will require -- unequivocally -- statistical adjustment of the 1990 Census.

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[3] Testimony of Doris Meissner, INS, to the Subcommittee on Energy, Nuclear Proliferation and Government Processes of the U.S. Senate Committee on Governmental Affairs, September 18, 1985.

[4] Plyler v. Doe, 457 U.S. 202, 218 & n.17 (1982).

Testimony of

David R. Jones

Before the

Subcommittee on Energy

Nuclear Proliferation and

Government Processes

of the

United State Senate Committee on Governmental Affairs

New York, New York

Thursday, September 4, 1986

I am David R. Jones, General Director of the Community Service Society of New York. From 1979 to 1983, I was Special Advisor to the Mayor of the City of New York, Edward I. Koch. Between 1979 and 1981, I was also the Director of the City's 1980 Census Effort.

Early in 1979 the City of New York became concerned about the planning being done for the 1980 Census. A pre-test for the '80 Census had been conducted in Lower Manhattan in 1978. That pre-test had alarmed many local residents and officials because of the manner in which the Bureau of the Census had conducted its outreach and enumeration. The Office of the Mayor was told by local residents that the Bureau had made little or no effort to adapt its materials, or procedures to suit the ethnic and social conditions of Lower Manhattan. As the honorable members of this Subcommittee may be aware, this section of New York contains large numbers of poor families. The Bureau made little or no attempt to address their problems of language and fear of governmental intrusion. As a result of this Pre-test, the Bureau itself admitted that it was confronted with unique difficulties in New York City.

Moreover, the National Academy of Sciences, in a report requested by the Secretary of Commerce, raised serious concerns about the 1980 Census. The NAS Study uncovered the fact that in 1970, 7.7% of the nation's black population -- four times the rate for white Americans -- had been missed by the Census. In addition that report indicated that an extraordinary 18% of black men between the ages of 25 - 44, were also missed in 1970. Similar undercounts were thought to have existed for the nation's Hispanics. These facts were of obvious concern to the City of New York, which has a minority population approaching 50%. An undercount of this magnitude might very well, and in retrospect turned out to have, seriously missed substantial numbers of New York's population. The City's problems were compounded by the high concentration of undocumented aliens thought to be living in the five boroughs. The Immigration and Naturalization Service and the Internal Revenue Service had made statements to the effect that there were perhaps as many as 500,000-750,000 undocumented aliens residing in the metropolitan area.

With all these factors in mind, especially the problems of undercount in prior censuses, and the obvious deficiencies of the 1978 Pre-test, the City began to organize in 1979 to try to improve the count, both through co-operation with Census in preparation of the Bureau's efforts in the City and direct publicity and outreach to New York residents. The Mayor directed that I establish a 1980 Census Effort to do the following: (i) examine what the City could

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1. National Research Council, Counting the People in 1980: An Appraisal of Census Plans (Washington, D.C.: National Academy of Sciences, 1978) p.3

do to improve the accuracy of the count; (ii) to oversee the progress of census efforts in the city, and (iii) examine the City's options in the event that an accurate count did not seem possible.

In August of 1979, I met with then Director of the Census, Vincent Barrabba, at his office in Washington, to discuss plans for the 1980 Census. At that time, I was informed that the amount of money available for publicity for the Census was severely limited by budgetary constraints placed upon the Bureau by the President and Congress. The City was asked, and did in fact, create a Complete Count Committee of prominent local individuals to assist the residents of New York in learning about the importance of the census count to the City. The Committee did in fact raise $100,000, for census publicity efforts. These funds provided a significant number of public service announcements on local radio and television channels explaining the importance of participation in the Census process.

Almost from the outset the City ran into difficulties in terms of Census procedures. The primary methods of enumeration for the Census nationwide both in prior Censuses and 1980, was mail delivery of Census questionnaires to each household, with a follow-up visit only to those households that failed to respond by return mail. Nationwide the return rate by mail was well in excess of 80% -- those returns are believed to be the most accurate and complete of the data reports that were received by the Bureau.

In order to mail to each household, the Bureau compiles mailing lists or "Master Address Registers" ("MARS") for each locality. A problem with these lists emerged early on the conduct of the '80 Census. The Bureau, despite objection by the City, decided to use a Master Address Register purchased from commercial vendors. These lists had been compiled expressly to serve the needs of nationwide credit card companies and retailers. Because these customers had little or no interest in the poorer areas of the City, addresses in the poorest neighborhoods of Brooklyn, Bronx Manhattan and Queens had not been updated for 10 years or more. Enormous numbers of units had been created or ceased to exist during that period. These Master Address Registers were also the basis for follow-up enumerator visits. Inaccuracies contained in these lists impacted the entire 1980 Census process in New York.

Because of the criticism of the Master Address Registers by the City, the Bureau committed to a variety of steps to improve the accuracy of the lists. The Bureau planned to have the Postal Service check them against its records on three occasions, it planned to have its enumerators canvass housing units before April 1, and it planned to have local officials review housing unit totals. The results of all these operations were to be used to revise the commercial lists. In New York State and City, at least one Postal Service check was not done all, or only partially done, and the results typically were not transferred to the MARS. The precanvass began so much later than planned that it was done haphazardly, and in a number of districts, results were not transferred to the lists. The local review of total housing units, which was to be used to correct the list, was cancelled. Thus, the Master Address Registers were substantially incomplete when mail out/mail back was begun, and enumerators has only these deficient lists to work from to determine which household units required personal follow-up. Many individual units within buildings, as well as entire buildings, were not identified or counted, either through mail out/mail back, or personal follow-up.

As of the end of April 1980, the average mail return rate nationally was 87%, but in New York City, the rate averaged 68%, with some predominantly poor, minority districts having return rates as low as 44%. The enumeration staff hired for field follow-up was inadequate given this mail return rate and the consequently great number of households requiring personal follow-up in New York State, and City.

It gets worse. Beginning on or about April 14, 1980, each Census Bureau District Office was supposed to send enumerators to visit each household which had not returned a completed questionnaire. This stage in the enumeration process, involving household visits by enumerators, was called Follow-up I. In response to demands that greater converge efforts be made in neighborhoods with large minority and immigrant populations, the Census had promised to hire enumerators from local communities who were fluent in languages other than English, particularly Spanish. However, not only did the Bureau fail to hire sufficient bilingual enumerators to work in New York's minority communities but, based on a report issued by the G.A.O. on June 3, 1980, the Bureau had only hired 59.5 percent of its required number of enumerators for the entire City -- the lowest staffing rate in the nation.

The Census Bureau knew that Follow-up I enumeration in many poor and minority neighborhoods in New York would be a very difficult process. People in those neighborhoods are generally suspicious of strangers, and are particularly loathe to give information to government employees. In addition, the neighborhoods themselves are extremely dangerous places to conduct surveys, especially with only two days of Census.

Nevertheless, the Bureau did not make adequate special efforts to conduct an accurate enumeration of these areas. Census officials refused, despite repeated requests by the City, to allow enumerators to work in pairs in high crime areas. In addition, Census officials refused to authorize payment of enumerators upon an hourly -- instead of a piecework -- basis despite the difficulty enumerators experienced in obtaining responses in the poorer neighborhoods. Finally, enumerators we learned later were commonly not paid for six to eight weeks because of bureaucratic foul-ups.

As a result of these practices, and based upon press and Census employee reports received by the City, the City learned that many enumerators refused to go into buildings in poor and minority neighborhoods and instead marked thousands of occupied housing units as vacant or simply guessed how many persons lived in such units. This practice, is called "curbstoning," resulted in a count that was much lower than the correct figures in these neighborhoods.

Let me now cite some additional failures and inadequacies of the 1980 Census in New York City.

-- The so-called "casual count" of persons not living in traditional households, such as derelicts and others with no fixed place of residence, was cut short, despite the specific request of the Census supervisor in charge for more time to conduct the survey.

-- All Census questionnaires initially mailed to household were in English. A small box on the front of these questionnaires stated, in Spanish, that a Spanish language questionnaire could be obtained by calling a telephone number. This procedure made Census responses by Spanish-speaking residents much less likely.

-- Despite an advertising budget of nearly $150 million nationwide, the advertising of the Census on television, radio and in the print media was cut short, before the full process of enumeration was over. The result was that almost everywhere in the City, and particularly in minority neighborhoods, the impression was that the Census ended on April 1, 1980. The Bureau's much vaunted "Were You Counted? "Campaign" to count missed persons was so underfunded that there was almost no publicity and no response by City residents.

-- In response to criticisms that the Census has undercounted minorities in the past, the Bureau promised an "outreach" campaign to encourage minority participation in the Census. This campaign was not conducted in an effective manner in New York. The Bureau refused to pay for advertisements in broadcast and print media directed to minorities. As noted before, the City managed to raise approximately $100,000 with which it printed and distributed about three million flyers and posters, but it could not come close to producing the media effort required.

-- New York City officials were not given lists of housing units which the Census Bureau claimed to be "vacant" so that we could check these lists against our own data. Nor was the City permitted to see the Master Address Register to check its completeness, even though addresses alone have no claim to confidentiality.

-- A fire was set in the records room of the Census's Bedford Stuyvesant District Offices, destroying the entire community's Census forms. Despite repeated requests, a much abbreviated recount was all that the Bureau permitted, because of a central directive as to the final closing date for all local Census offices.

-- Because of a shortage of workers the Census Bureau was forced in Central Harlem to hire persons receiving methadone maintenance as Census takers, despite community opposition and fear of revealing confidential information to such an obviously unreliable work force.

The conduct of 1980 Census in the City of New York was grossly mismanaged, in part that was the result of poor local management. But the more significant reason was the lack of funds appropriated for the Bureau`s New York effort. This lack of sufficient resources led to the reliance on a inaccurate mailing list; the almost total lack of publicity to convince an urban population of the importance, confidentiality and even the safety of the Census process; a failure to properly recruit, screen, train, and pay census enumerators and supervisors; and too little time in which to implement such a massive undertaking.

Even if improvements are seen in these procedures for 1990, it will still leave New York City with an undercount of minorities, undocumented aliens and the poor which will unjustly deprive the City of both political representation and funds.

From all indications, the 1990 Census for New York is shaping up in much the same way as the 1980 Census did, with budgetary restraints certain to severely limit any prospect of improved accuracy in the City's count.

In closing, I strongly urge that this Committee support a statistical adjustment of the Census, to correct for the gross undercount of minorities, undocumented aliens and the urban poor. I believe that this position is warranted both because it will provide a much more accurate picture of the number of persons residing in the City and because it appears unlikely in a time of fiscal austerity that either the President or the Congress would be willing to expend the tremendous amount of money necessary to achieve a significantly improved count.

I do have a few modest proposals in addition to statistical adjustment. They include the following:

-- More money should be allocated for pre-census publicity. In particular, the theme of the total confidentiality of the Census form should be driven home so that vulnerable populations feel less threatened. Paid advertisements should be taken out in the minority press, which cannot do the full job necessary on a pro bono basis.

-- Enumerators should be better paid and trained to do what is generally conceded to be a very difficult job in areas of high population density and where the mail-back rate is particularly law. Additionally, more enumerators should be assigned to areas such as New York City where disproportionate undercount is a certainty.

-- There should be a longer period of data collection to allow for well-planned and conducted follow-up procedures.

-- The Master Address Register to be utilized must be brought up to date since these are the primary bases for enumeration. Provision should be made for cross-checking the Bureau's MAR with postal records and local housing unit records and other accurate records held by the City, in a systematic manner.

TESTIMONY OF EUGENE P. ERICKSEN
TO BE GIVEN BEFORE THE SENATE COMMITTEE ON GOVERNMENTAL AFFAIRS, SUBCOMMITTEE ON ENERGY, NUCLEAR PROLIFERATION AND GOVERNMENT PROCESSES
SEPTEMBER 4, 1986

My name is Eugene P. Ericksen. I am a survey statistician and social scientist with over 20 years experience of working with census data. Currently, I am an Associate Professor in the Department of Sociology at Temple University and a Special Consultant to National Economic Research Associates, Inc. I am also co-author, with Professor Joseph B. Kadane, of the paper, "Estimating the Population in a Census Year", published in 1985 in the Journal of the American Statistical Association. This paper, which I submit along with this testimony, describes my views concerning methods of data collection and estimation on the Decennial Census.

I am here to make three points: (1) regardless of how much money and effort are expended on the traditional headcount, a differential undercount is inevitable in the American Census; (2) coverage improvement procedures, aimed at simply redoubling traditional headcounting efforts, do not solve the problem and indeed can increase the amount of error in census data; and (3) methods of estimation exist by which an imperfect census can be adjusted to bring the count closer to the truth. I conclude that for the 1990 Census, we should direct funds toward the development and implementation of appropriate adjustment techniques rather than toward so-called "coverage improvement".

1. Error in the Census Is Inevitable

The Census is a survey that provides and can only provide an estimate of the true population. It is inevitably fraught with error in the collection of data that necessarily results from census procedures. Inequity occurs when, as is invariably the case, the errors are greater in some places than others. In the United States, errors due to undercounting are greatest in central city neighborhoods inhabited by minority populations. These errors have caused these cities and their states to be shortchanged in terms of political representation and fund allocations.

Problems giving rise to error beset any attempt to collect survey data. Such problems are present in magnified form in an undertaking as massive as the census. This is especially true because the majority of census workers at many levels are temporary employees without prior experience in collection of data. At peak periods during the 1980 Census, the Bureau employed about 275,000 temporary employees in its field offices and about 6,300 temporary employees in its three specialized processing centers. It is extremely difficult to find people qualified to be enumerators in poor urban areas, and the time and funds available to train them for the job are limited. Quality control problems inevitably cause errors in census data as the Bureau itself has recognized in evaluation studies that follow the Decennial Census (e.g., ER-60 Series after the 1960 Census, PHC(E) Series after the 1970 Census, and PHC-80 Series after the 1980 Census).

An important feature of the errors in the Census is that they are systematic. By design and as implemented, the Census is best suited to count those whose homes are clearly recognizable as residential structures at identifiable addresses, who are willing to cooperate with the government by providing the requisite information, who are proficient in English, who are educated and who are members of a well-defined family unit. Where those conditions are not met, the likelihood of census error is greater. Problems can be identified at each step of the census process.

The first step is the preparation of address lists. In urban areas the Census Bureau relies on commercial address lists which it then updates through field checks. A study by the General Accounting Office has shown that the commercial lists are much worse in poor central city neighborhoods than they are elsewhere. Updating the lists through field checking is also difficult in these neighborhoods, which are often dangerous and in which multiple housing units at the same address are frequently disguised and hard to spot without contacting the residents.

Additional errors occur when census forms are mailed to those addresses included in the listings. In order for a household to receive a form, it must not be lost in the mail for any reason. The mailing label must be affixed properly, the address must be legible, and the form must be handled properly by the Post Office. In apartment buildings or other multi-unit structures where mail is received collectively, the residents must distribute the questionnaires correctly among themselves for each household to receive its form. In areas like the South Bronx, where there were thousands of broken mailboxes and where the questionnaires often did not include the name of the addressee as part of the mailing address, many people did not receive census forms in 1980.

Assuming a questionnaire is received, someone in the household must open it, answer it correctly, and return it to the Bureau. The questionnaire may go unopened or it may be opened but then lost. The questions may not be understood by the respondent and thus may be incorrectly answered, particularly if the respondent is poorly educated or if the respondent's native language is not English. Even if the questionnaire is correctly answered and mailed back, it may be lost in the mail. Assuming the form is received by the Census Bureau, it must be correctly recorded and tabulated. Inevitably in this process, forms are lost or destroyed and the data on some are misrecorded or mistabulated.

If the household does not return the form, an enumerator is sent to visit the address and attempt to collect the form. Depending on the crime rate and ease of finding the address in the area, this is a job of varying difficulty. Where the mailback rate is higher, this job is easier. While a low mailback rate does not mean that people inevitably will be missed, it certainly makes it more likely because the job is so much harder. The task was substantially more difficult in the Bedford-Stuyvesant area of Brooklyn, where fewer than half the population mailed back their census forms, than in a middle-class suburban area where the mailback rate was 90 to 95 percent.

In some cases, the enumerators are not able to find any household residents. In such instances, the enumerator is told to seek out a neighbor, building janitor, or similar outside source to obtain information about the unit. Such people have imperfect information, and less than ideal motivation to supply it. Moreover, many enumerators, perhaps in frustration, simply "invent" their own information in a well-known procedure called "curbstoning". Finally, the quality of the follow-up, like the quality of the address lists, is adversely affected by the use of a large number of temporary employees as enumerators.

The foregoing points are not made in criticism of the Census Bureau, but merely to show that it is impossible accurately to count every person and that it is the most disadvantaged members of our society who, by the nature of the Census, are the ones predominantly missed. Indeed, the Census Bureau recognizes the existence of most of these problems, and has attempted to remedy them. The remedies, however, are themselves imperfect solutions. Since these imperfections are most likely to result in errors in situations where it is most difficult to count people, the errors are cumulative. It is a general principle of survey research that checks need be made at every step of the process of data collection. This means checking the completeness of the address list, making sure that all forms are returned, checking the validity of data on every form, and making sure that all data are correctly processed through the computer. As the data base grows larger, the proportion of resources needed to be devoted to quality control grows larger. When the survey attains the size of a Decennial Census, the goal of complete quality control becomes unobtainable.

2. The Geographical Distribution of the Undercount

The Census Bureau evaluated the undercount by means of its Post Enumeration Program (PEP) in 1980. Best estimates indicate that 10 to 13 million persons were omitted from the Census, 6 million others were erroneously enumerated and 3 million additional person-records were created by computer by a method known as imputation. This resulted in a net national undercount of one to four million persons, concentrated in central cities. The PEP produced separate estimates for 16 large central cities like New York and Chicago. In these cities, the combined omission rate was estimated to be 9.9 percent, compared to 5.0 percent elsewhere. The rate of erroneous enumeration was 2.6 per cent, comparable to the 2.9 percent observed elsewhere. The net result was an undercount of six percent in the cities and one percent in the rest of the country. As shown in the table below, the differential undercount was especially great for Blacks and Hispanics, who were missed at rates exceeding ten percent in the cities.

The 1980 Census was the first one for which this type of geographic detail was presented on the undercount. However, the racial pattern is similar to that observed on censuses since 1940. For example, in 1970 the Bureau used demographic methods to estimate an undercount of 7.6 percent for Blacks and 1.5 percent for Whites, a differential of 6.1 percent.

Undercount Rates for Three Ethnic Groups
in Central Cities and Elsewhere

Location	Blacks	Non-Black Hispanics	Other	Total
	Group			
Central Cities	11.3%	10.3%	1.5%	6.0%
Elsewhere	5.5%	4.5%	0.2%	1.0%
Total	7.2%	5.9%	0.3%	1.6%

The racial differential for 1980 as measured by demographic analysis was 5.9 percent, a scant improvement. It is this differential that is so intractable, resisting the best efforts of the Census Bureau to obtain complete and equitable counts. On the basis of the results for 1980 and earlier years, we can expect the same pattern of differential undercounting to occur in 1990 and later.

3. Coverage Improvement Campaigns Do Not Solve the Problem

The 1980 Census was by far the most expensive in American history. According to a report of the General Accounting Office, the inflation-adjusted cost of counting one person in 1980, $4.72, was more than twice the 1970 cost, $2.30. According to a panel of the National Academy of Sciences 1/, which reviewed a variety of coverage improvement programs with a total cost of approximately $100 million, programs directed toward improving address lists improved the count in a cost effective manner, as

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1/ National Research Council, The Bicentennial Census: New Directions for Methodology in 1990.

16.4 million people were added at a cost of $28.1 million, $1.71 per capita. However, coverage improvement programs attempting to add population during the data collection period were less effective, as only 2.6 million people were added at a cost of $69.7 million, $26.81 per capita, and indeed, the cost for some programs was as high as $75.54 per capita.

There is ample evidence that, in addition to failing to reduce the omission rate substantially, the coverage improvement programs caused erroneous enumerations to increase. For example, without a corresponding check of households initially classified as "occupied" the National Vacancy Check was bound to inflate the count. The NAS Panel found that several coverage improvement programs could cause erroneous enumerations, and this is consistent with the results of two Census Bureau studies.

The first, a study of housing unit duplications, found that approximately two million people live in housing units that were counted twice, often in rural areas where enumeration district boundaries are less clear and street addresses lacking. The second, a more comprehensive estimate of erroneous enumerations, found that they were much more likely to occur during follow-up activities than on the initial mailout-mailback. Among persons counted during the follow-up period when enumerators collected the data, one in fourteen turned out to be erroneous enumerations.

There are many potential explanations for this high rate of error. One is that the period of data collection lasts so long, stretching into the fall of 1980 in many areas. Given the high mobility of the American population, the same family could be counted twice in different places (either because it moved or had two residences) with the family being unaware of it because information was provided by different family members or neighbors. Another explanation is simple fabrication, occurring when enumerators are under great pressure to get forms completed to meet Bureau deadlines.

4. Adjusting the Counts

The Census Bureau recognizes that the disproportionately severe impact of the undercount on minorities and the communities where they live is the key problem in the accuracy of census data. As Vincent Barabba, Bureau Director during the 1980 Census, wrote, "the key issue [is] differential undercount--the fact that blacks and other minorities are missed more often than whites in the count of the U.S. population." 2/ The Census Bureau also recognizes, as we all recognize, that the disproportionate undercount of various minority groups is most severe in major metropolitan centers and results in a particularly severe undercount of major cities. As I show in Section 2 of this testimony, the Bureau's own studies show consistently that Blacks and Hispanics are missed at higher rates than Whites, and that minorities living in central cities are missed at a higher rate than minorities living elsewhere.

Further, the Census Bureau has acknowledged that coverage improvement programs can actually exacerbate the disproportionality of the undercount. As various Bureau officials and advisors stated at a conference on the 1980 Census post enumeration program held by the Bureau in October 1980:

> --"You could reduce the 1970 undercoverage level, but perhaps increase the differential." (Vincent Barabba, Director);
>
> --"Don't be surprised if you get something like an overcount of Whites and an undercount of Blacks with therefore an impossible to compute differential except in absolute terms or something that might go far beyond the 4 to 1 of 1970." (Jacob Siegel, Senior Demographic Statistician);
>
> --"[A]s the census pushes harder and reduces the undercount its almost certain to increase the differential of the undercount." (Prof. Nathan Keyfitz, Department of Sociology, Harvard University)."

2/ Mitroff, Mason & Barabba, The 1980 Census: Policymaking Amid Turbulence, p. xiii.

Having recognized that "coverage improvement" is extraordinarily expensive, that it will not eliminate the undercount, and that it can and does increase the racial differential undercount, one would expect the Census Bureau to deal with the undercount problem by other means, i.e., by statistical adjustment. Indeed, statistical adjustment is the clear solution to this problem. The Bureau has repeatedly been advised to this effect by groups of distinguished experts, including the Census Advisory Committees of the American Statistical Association, the American Economic Association, the American Marketing Association, and Population Statistics, as well as a panel of the Committee on National Statistics of the National Academy of Sciences. The Bureau says it has been spending a lot of time and effort preparing to make such an adjustment, but it hesitates to do so.

Much of the reason the Census Bureau hesitates to adjust the Census for the differential undercount is political. Vincent Barabba, Director of the Census Bureau during the 1980 Census, has characterized the decision on adjustment as "value laden" and "political", and has said:

> "If, in fact, the Bureau does all of the things it plans to do, and the enumeration is still differential, then the dilemma arises.
>
> "The decision about what you do in that case is a political decision." 3/

In substance, since the motivation is political, Congress clearly must give the Census Bureau a push. Without such a push from Congress, nothing will happen. I base that judgment on the fact that what we are now hearing from the Bureau about its preparation for adjustment in 1990 is substantially the same as what we heard about its preparation for adjustment in 1980.

Prior to 1980, the Bureau said it had not directed sufficient research effort toward developing good adjustment

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3/ "A Right To Be Counted", American Demographics, p. 46 (1979).

methods. As Barbara Bailar, Census Bureau Associate Director for Statistical Standards, testified about the 1980 Census:

> "We have been doing matching studies off and on over a period of 30 years . . . I think if we had been working on matching and really devoting all kinds of research necessary to learn how to do matching well, we would probably be a lot further ahead."

According to Dr. Bailar, since 1980, the Bureau has devoted substantial efforts toward developing an adjustment methodology. The Bureau states that it now considers an adjustment for the inevitably differential undercount to be a forseeable possibility. The Bureau has bound itself to make a decision on the feasibility of adjustment in February 1987, and attests to optimism that adjustment will be feasible for the 1990 Census. As Dr. Bailar testified before the House Subcommittee on Census and Population on July 24, 1986:

> "In early 1987, we will decide on the statistical and operational feasibility of adjustment . . . . Although we cannot say definitely at this time what our determination will be, our research thus far on undercount measurement has been promising."

In the face of the Bureau's persistent assertions that it is studying the problem of undercount very hard, I would like to join in this optimism about the probability of an adjustment in 1990, but I cannot. I am concerned that what the Bureau is saying today is no different from what it stated in the years leading to the 1980 Census. Once again, the Bureau seems to regard studying a problem as the equivalent of solving it. As a result, the best becomes the enemy of the good. Thus:

--As of 1976, the Bureau had established as "one of the objectives . . . for the 1980 Census . . . to develop procedures by which the residual undercount can be distributed at least to States and major metropolitan areas so that corrected population counts can be published". 4/

4/ GAO Report to House Committee on Post Office and Civil Service, p. 21 (May 5, 1976).

--In February 1980, the Bureau hosted a conference of expert demographers and statisticians on the question of adjustment. As reported by the conference chair, the conferees were in "general consensus that some form of adjustment for the undercount is needed, for areas with concentrations of persons likely to be missed may be receiving less than their share of funds which are distributed in part or wholly on the basis of population". 5/

--In August 1980, Bureau Director Vincent Barabba stated at a news conference, "Don't order us to adjust until the final results are in . . . . If they show us we have undercounted, we will adjust". 6/

In spite of these sentiments, the Bureau announced a decision not to adjust on December 16, 1980, before data on the undercount were ready for analysis. As everyone had anticipated, the differential undercount took place in the 1980 Census, but the Bureau did not adjust.

5. Conclusion

Given the intractable difficulties of counting in urban areas, the differential undercount is inevitable. The Census Bureau's claims that massive advertising will lessen the problem constitute little more than wishful thinking. In 1980, the Bureau's advertising budget was third in the United States behind only those of McDonald's and Ford. Yet, a Bureau survey showed that 4 percent of Whites, but 12 percent of Blacks and 10 percent of Hispanics had not heard of the Census. 7/ Neither are coverage improvement programs a viable or effective option. After $342 million was invested toward this end in 1980, a differential undercount occurred, and an estimated six million erroneous

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5/ Conference On Census Undercount, Proceedings of the 1980 Conference, p. 3 (1980).

6/ "Census Head Indicates '80 Figures Could be Adjusted for U.S. Grants", New York Times, p. B4, col. 5 (Aug. 27, 1980).

7/ Bailar & Keyfitz, "Issues in Adjusting for the 1980 Census Undercount", p. 8 (1981).

enumerations were included in the count. 8/ The inevitability of this differential makes adjustment the only practical solution. For this to occur, the Bureau needs a clear mandate from Congress, not only in terms of funds for developing the adjustment methodology, but also in terms of a direct instruction to produce an accurate population estimate.

You may wonder why I urge Congress to intrude upon what appears to be a technical matter. First, as the Subcommittee is no doubt aware, the Constitution makes the Census the particular responsibility of Congress. 9/ Second, the Census serves as the Constitutionally mandated tool for the allocation of political power. This means that failure fully to count various categories of people and the communities in which they live affects far more than the accuracy of statistical data. The failure to adjust undermines the "one-man, one-vote" principle and threatens public confidence in the fairness of the political process. Similarly, because census data are used in the distribution of billions of dollars of federal revenues, the undercount may be translated directly into lost resources for urban areas. Third, at a pragmatic level, when a better estimate causes some groups and places to lose strength, they may protest, and the Bureau may look to Congress for support for doing the statistically correct thing.

Finally, as a technical matter, the Census Bureau has demonstrated that it knows how to adjust census data and does so when it wishes to. The Bureau adjusted the 1970 Census figures through the National Vacancy Check and the Post Enumeration Post Office Check. Further, in connection with the calculation of general revenue sharing allocations, the Congress has directed the Secretary of the Treasury to use the "most recent available information" from the Bureau

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8/ Cowan & Fay, "Estimates of Undercount in the 1980 Census", Proceedings on the Section on Survey Research Methods, American Statistical Association, pp. 566-71 (1984).

9/ "The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct." U.S. Constitution, Article I, Section 2.

of the Census. 10/ In response, the Census Bureau has computed postcensal changes in population and income for each of 39,000 revenue sharing units. Alternatively, the Bureau might have relied instead on the most recent census results, in effect assuming that all areas had changed at the same rate since the most recent census, but it did not. Rather, the Bureau used demographic analysis, matching procedures, and regression analysis to compute separate and updated population estimates for each local area and hence, to "adjust" the census. Even though the small-area estimates contain errors, the overall quality of the population data is improved, since all areas do not change at the same rate. The technical problems involved in adjusting the decennial census are no more difficult than the problems encountered in preparing postcensal updates.

In an ideal world, I believe the Census Bureau would likewise use its professional judgment to adjust the count. Indeed, I am confident that once the Census Bureau decides to adjust, it will do an excellent job. Perceived political pressure causes the Bureau to hold back--hence the need for Congressional instruction. This instruction should be given before the data are in, to prevent the appearance of attempting to alter census results to benefit some areas at the expense of others. The method of adjustment should be left to the discretion of the Bureau, since any professionally acceptable method will ameliorate the discrepancy resulting from the differential undercounting of minority groups, especially those who live in cities, and bring the counts closer to the truth. Even relatively crude tools can improve on large errors. It is time for Congress to assure that the 1990 Decennial Census will be significantly more cost-effective and accurate than those of the past.

10/ 31 U.S.C. § 6713(a).

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DEPARTMENT OF SOCIOLOGY

September 27, 1986

Senator Thad Cochran
Subcommittee on Energy,
Nuclear Proliferation,
and Government Processes
Room 605, Hart Senate Office Bldg.
Washington, DC 20510

Dear Senator Cochran,

Enclosed please find a statement amplifying my answers to your questions concerning standards for adjusting the census and accounting for undocumented aliens at the September 4 hearing.

I have sent my corrections to the transcript to Christina West. I appreciate the chance to have testified, and I feel that it was a useful hearing.

Yours,

Eugene P. Ericksen

Centennial Challenge Program 1884-1984

STANDARDS FOR DECIDING WHETHER TO ADJUST

Virtually everyone will agree that we should adjust the census for undercounting if we believe that the adjustment will make it better. Such an adjustment would increase the fairness of political apportionments and fiscal allocations based on the census. The crucial question is--how do we know that we are making it better?

I believe that we can be confident of improving upon the unadjusted count if three things are true:

- there is substantial variation among areas in rates of undercounting and overcounting,
- the adjustment is consistent with what we know about the undercount, and
- we are reasonably confident that the adjustment improves upon the raw count in a majority of local areas.

Inter-Area Variations in Undercounting

When the Census Bureau decided not to adjust the 1980 Census, one of its major reasons for doing so was that the national undercount appeared to be close to zero*. Later analysis showed that this net figure masked not only a substantial undercounting of Blacks and Hispanics compared to a negligible undercounting of Whites, but also large variations in undercount rates among local areas. The undercounts were largest in those areas, such as central cities with large minority populations or rural areas where the mailout-mailback procedure was not used, where census-taking problems had been concentrated. These are the areas which have been shortchanged by the imperfect count, and these are the areas which will probably be shortchanged by an unadjusted count in 1990. As long as such differentials exist, we have an excellent chance of being able to improve upon the raw counts with an adjustment. Put simply, when differential undercounting is as pronounced as it has been, even a crude adjustment is likely to be an improvement. More refined adjustments, of which the Bureau is capable, will be still more likely to improve upon the raw counts.

What We Know About the Undercount

The Census Bureau has conducted demographic and statistical studies of the undercount since 1940, and each of these studies has come to the same conclusion--

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* U.S. Bureau of the Census, "Position on Adjustment of the 1980 Census Counts for Underenumeration," Federal Register, December 16, 1980, 82872-82885.

Blacks were missed at a rate substantially higher than that of Whites. Because the methodology of the 1990 Census will be substantially the same as that used in 1980, we have every reason to expect a similar differential. As Bureau Director Keane testified on September 4 with respect to the raw count, "In addition, we do not have the ability to completely eliminate the differential undercount. We simply do not have it."

Because the Census Bureau expanded its research efforts in 1980, we have learned a great deal of additional information about the undercount. Hispanics were missed at rates similar to those of Blacks. Minority populations in large cities were missed at rates higher than minority populations elsewhere, and there were certain rural areas with high rates of undercounting. In general, where census-taking problems were greater, undercounts were higher.

A good adjustment can and should be consistent with this knowledge. It will first of all mirror the demographically estimated differential between Blacks and Whites, correcting more for the people known to be missed at higher rates. Secondly, the adjustment should make sense in terms of census-taking problems. For example, we would expect the adjustment to be greater in those areas where good address lists are unavailable, where good enumerators are hard to hire, where crime rates are higher, or where there are substantial concentrations of non-English speaking people. On the other hand, should the nature of census-taking problems be different in 1990, from those seen in 1980, we would expect the pattern of undercounting to change. A good adjustment can and should correspond to these expectations.

Our Confidence in the Adjustments

When the Census Bureau adjusted the raw count in 1970 by means of the National Vacancy Check, it justified the adjustment by a standard of the kind that could be used in 1990. It stated that an adjustment calculated by their procedure would improve upon the raw count if the true but unobserved undercount was more than half of the adjustment**. For example, if the true undercount were 2 per cent, then an adjustment between 0 and 4 per cent would improve upon the raw count. For the 1970 adjustments, the Bureau calculated the probabilities of improvements for areas of different sizes. For the nation as a whole, and for the various regions, the probability of improvement was nearly 100 per cent. The probability of improvement for a local area with population over 250,000 was about 85 per cent and the corresponding probability for an area with population between

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** U.S. Bureau of the Census, "Effect of Special Procedures to Improve Coverage in the 1970 Census," in Census of Population and Housing: 1970 Evaluation and Research Program PHC(E)-6, Washington, U.S.Government Printing Office.

50,000 and 250,000 was 70 per cent.

This is a reasonable standard which should be attainable in 1990***. The science of statistics is such that we cannot calculate estimates without error, but we can often assess what these errors are likely to be. An adjustment can never be perfect, and our objective is to reduce bias as much as we can. Our calculations can take account of the fact that the adjustments are necessarily based on samples, and we can make reasonable assumptions taking into account such problems as missing data. Statisticians routinely estimate what error rates are and evaluate the reasonableness of their assumptions.

In 1980, in cities and states with high rates of undercounting, adjustments can be calculated with sufficiently small standard errors that we can be 90 per cent sure of improving upon the raw count. For smaller areas, or areas with lower rates of undercounting, both the adjustments and their chances of improving upon the count are smaller, but it is reasonable to conclude that the adjustments improve upon the count in a sizable majority of local areas.

The Conservative Nature of an Adjustment

Concern has been raised over whether an adjustment could take account of undocumented aliens. Our proposed adjustment procedures are based on the matching of samples against census records and estimating proportions of persons missed. Any such sample, whether it is based on the Current Population Survey (as in 1980) or an independent Post Enumeration Survey (as proposed for 1990) is likely to under-represent those persons most likely to be missed by the census. Important examples of such persons are undocumented aliens, homeless people, and young adult Black males. Such subpopulations are partially accounted for by an adjustment, and the fact that they have clearly higher than average undercount rates makes the proposed adjustment conservative. Because these groups are concentrated in areas where the adjustments will nevertheless be greater than average, such adjustments will be more likely to err on the low side. The conservative nature of such an adjustment reduces the chance of overcompensating for the differential undercount. In so doing, we will have made a partial adjustment for especially hard-to-count groups like undocumented aliens.

*** The Census Bureau used a comparable standard in evaluating the postcensal estimates for local areas used for revenue sharing. It found that the estimates were better than the most recent census in 66 per cent of areas with populations above 1,000. For smaller areas, the probability was reduced to 55 per cent, and the Bureau indicated concern that the latter set may not be sufficiently accurate. See U.S.Bureau of the Census, Current Population Reports, Series P-25, No. 963, "Evaluation of 1980 Subcounty Population Estimates," Washington, U.S.Government Printing Office

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TESTIMONY BEFORE THE U.S. SENATE SUBCOMMITTEE ON ENERGY, NUCLEAR PROLIFERATION, AND GOVERNMENT PROCESSES TO REVIEW THE U.S. CENSUS BUREAU'S PLANNING FOR THE 1990 DECENNIAL CENSUS

BY HAZEL N. DUKES, PRESIDENT OF THE NEW YORK STATE CONFERENCE OF NAACP BRANCHES

September 4, 1986

CEREMONIAL COURTROOM OF THE U.S.
COURT OF INTERNATIONAL TRADE
1 FEDERAL PLAZA
NEW YOKR, NEW YORK

Good morning members of the panel. I am Hazel N. Dukes, President of the New York State Conference of Branches of the National Association for the Advancement of Colored People. I am pleased to be here to share with you my views on this most important subject of the 1990 Census. The members of the 77 NAACP Branches, Youth Councils and College Chapters in New York State have an abiding interest in developing measures that will insure a full and fair count of all New Yorkers, particularly Black New Yorkers. We especially know the negative consequences of undercounting. We know that allocations of all types of resources are based on the numbers of people living in a community who are counted in the census. At the top of the list of those things that directly impact on all aspects of life is political representation. Congressional seats, State Legislative seats, City Council seats, County Board positions, and school board positions are based on the number of people living in an area WHO ARE COUNTED.

Based on the last census in 1980 Political representation in Black communities throughout New York State increased at the Congressional level by 300% with 2 Blacks elected to Congress in Brooklyn and one about to be elected in Queens! Four new Assembly seats were filled by Blacks as well as two State Senatorial seats as a result of re-apportionment based on the 1980 census. Now, this was good but not as good as it could have been if a full count had been made. There should be at least two additional Congressional seats in areas where Black New Yorkers live if a full count had been made in 1980. An additional 3-5 seats in the State Legislature could also have been won by the Black community.

Laws and Budgetary decisions made in the Congress and in State Legislatures can be made more fairly and sensitively for all New Yorkers if those who are the law makers include a fairer representation of all New Yorkers.

In addition to Political Representation many Federal and State financial allocations are based on the population that is counted. Entitlement programs in many areas are vastly underfunded because the Black and poor communities are not fully counted. It is ironic that those New Yorkers most in need are not counted in the Census and therefore do not count in any other economic or political program.

We must now look at the steps that need to be taken to prevent another decade of neglect of Black New Yorkers. First, this Committee must affirmatively resolve that there will be a full and fair census count. This then will provide the motivation and incentive to implement this policy of a full and fair count. If there is the will to do it then here is the plan.

1. The Census Bureau Staff and Administration must have Blacks at every level from the top down and bottom up.
2. Regional Offices must also reflect Blacks at policy and line levels.

3. Outreach efforts and public relations efforts must include Black firms who understand how to capture the attention of the Black community to encourage their cooperation in the count.

4. Information materials must be produced by and/with Black advice and participation.

5. All community outreach efforts should be coordinated through and with established Black community organizations and Black Churches.

6. Census takers should reflect the communities in which they work.

7. Qualifications for census takers should be based on skills directly related to interviewing and data collection on a form that is simple to read and fill out.

8. Orientation should include practice in role playing situations based on realistic circumstances.

9. Finally, in densely populated urban centers and other hard to count areas Advisory committees of local community leaders should be established in advance of the counting and should be continued until the count is concluded. Such committees can assist with recruitment and training of census takers as well as the orientation of the community to cooperate in the count.

The NAACP as the oldest most effective and most respected civil rights organization in the world is committed to eradicating every vestige of discrimination whether by intent or by result. On behalf of the New York State NAACP, I pledge my full cooperation with the 1990 Census and will make the resources under my responsibility available to this end.

Thank you

I will be happy to answer any questions you may have.